

371 C62

Clem, Orlie Martin, 1891- 010101 000

A work book syllabus in princ



0 2074 0095802 2

DAVIDSON COLLEGE LIBRARY

**LIBRARY OF
DAVIDSON COLLEGE**

**LIBRARY OF
DAVIDSON COLLEGE**

**A WORK BOOK SYLLABUS IN
PRINCIPLES OF EDUCATION**

A Work Book Syllabus in Principles of Education

TWENTY SELECTED UNITS WITH
PROBLEMS AND REFERENCES

BY

ORLIE M. CLEM

*Associate Professor of Education
Syracuse University*



BALTIMORE
WARWICK & YORK, INC.

1928

COPYRIGHT, 1928, BY
WARWICK & YORK, INC.

PRINTED IN THE UNITED STATES OF AMERICA

371
C62

THE MAPLE PRESS COMPANY, YORK, PA.

FOREWORD

This Work Book Syllabus has been prepared for use in teachers college and university classes in Principles of Education. The major emphasis is given to the field of secondary education. It is designed also for that great group of experienced teachers, many of whom are poorly trained professionally, who desire orientation in modern education. Principals and superintendents will find this group of problems, it is hoped, a source of stimulation in faculty meetings or in group study.

ORLIE M. CLEM

SYRACUSE UNIVERSITY,
March 1, 1928.

TABLE OF CONTENTS

	PAGE
FOREWORD	5
A PHILOSOPHY OF TEACHING.	9
UNITS	
I. INDIVIDUAL DIFFERENCES.	30
II. THE PHYSIOLOGICAL BASIS OF LEARNING.	46
III. NATIVE EQUIPMENT	56
IV. AIMS OF EDUCATION	59
V. CHALLENGE OF SECONDARY EDUCATION.	66
VI. DEVELOPMENT OF AMERICAN POLICIES IN EDUCATION.	73
VII. SECONDARY EDUCATION IN OTHER COUNTRIES.	77
VIII. THE SECONDARY SCHOOL PUPIL.	80
IX. ADOLESCENCE	84
X. DISCIPLINE OR SOCIAL CONTROL.	87
XI. EXTRA-CURRICULAR ACTIVITIES.	101
XII. GUIDANCE.	106
XIII. VOCATION AND EDUCATION	110
XIV. THE CURRICULUM	115
XV. TRANSFER OF TRAINING	120
XVI. INSTRUCTION.	125
XVII. THE TEACHER.	130
XVIII. THE NEW EDUCATION	137
XIX. MODERN EDUCATIONAL CONCEPTS	143
XX. LEADING EDUCATORS.	149
SUPPLEMENTARY REFERENCES BY THE AUTHOR.	150
REFERENCE BOOKS	152
REFERENCE MAGAZINES	157
INDEX.	161

A Work Book Syllabus in Principles of Education

A PHILOSOPHY OF TEACHING

This Work Book Syllabus has grown out of the author's experience in teaching Principles of Secondary Education. It represents several years of work both as to content and organization for teaching. A conscious attempt has been made to apply to a college course in education the best contributions of modern educational theory and practice. The Work Book Syllabus has been arranged on the basis of the following criteria.

1. College teaching should be revamped in terms of scientific knowledge about learning. The work of "teaching" should be worthy the instructor's best ability, his highest creative genius. There is vigorous and constant criticism of colleges and universities on the basis that college teachers are interested in research rather than in teaching, that it is only through research they can become well known in their fields. Recently, however, there have been hopeful signs. Frontier thinkers generally led by such men as Kilpatrick, Glenn Frank, Bagley, and Withers, have come to realize that there is such a thing as experimentation and research in teaching. Research in teaching is comparatively a new idea in the world. So insistent has been the pressure in

this direction in the years just past, that in 1927 the meeting of the National Association of College Teachers of Education was given solely to the subject, "The Improvement of College Teaching." The time has come to recognize that the most important thing in the intellectual life of college students is what goes on in the classroom.

A college teacher of education has an imposing responsibility. He should teach students to react to materials or subject matter. As James Harvey Robinson has suggested, "Teachers in general have been interested too much in teaching and too little in learning." The college teacher of education should constantly demonstrate good methods of teaching. The author believes also that the teacher of education should frequently call the attention of his students to the very techniques which he is using at the particular moment. Probably the best teaching is done just here. Hence "parrot questioning" and "platter solutions" are almost worthless. Further, the college teacher of education should be professionally minded rather than academically minded. The great teacher is one who successful himself reveals to students his own methods of work and frequently gives them an inkling of possibilities yet to be attained. The criticism of college teachers of education often made by students, "He tells us one thing and does another himself," is a sin which should not be condoned. More than any other, the college teacher of education should "practice what he preaches." The college teacher of education should do nothing which does not square with his fundamental philosophy or his specific teachings. For example, he should not develop a conception that individual differences

should be met, and at the same time conduct his course on the basis of deadening uniformity. He should not teach that all written work handed in by students should be corrected and returned, and never return his own students' papers.

The college teacher of education has a major interpretative function. Too often courses in psychology and education are "taught" and "learned" abstractly. The best evidence of this is the familiar phrase, "The plan seems good in theory, but it won't work in practice." Such a conception has little place in modern educational thinking where an outgrown metaphysics has given place to a functional psychology. From the functional point of view there is no conflict, no divorce, no discrepancy between theory and practice. What is good in theory does work in practice, and conversely.

The author is a thorough believer in professional courses in education, and yet he is sometimes shocked in observing teachers in training and in the field after graduation. No one would recognize in the procedure of some that they had just finished courses in principles of education, philosophy of education, educational psychology, secondary education, etc. One would sometimes consequently suspect that these courses were like the measles or the whooping cough,—to be had and forgotten.

The professional training of any teacher naturally divides itself into two fields which should go on at the same time and correlatively: First, the learning of principles; second, learning how to do the specific thing. Normal schools generally have tended to over-emphasize the latter, with the result that the teacher's training has been too stereotyped. Uni-

versities have tended to over-emphasize the former, with the presumption that the teacher knowing a principle will automatically make the right application in a concrete situation. Experience and observation prove this to be a dangerous fallacy. As Gates has emphasized, "We learn the reaction that we make."

Scientific experiment has made the field of education in recent years a veritable "Kimberley" or "El Dorado." Facts, principles, and laws of proved merit—treasure vats of educational worth—have been unearthed by the scientific investigators. But the question comes to us with full force, "To what extent is the actual teaching of the great army of lay teachers being affected?" There are two grave considerations to the promising picture above. The first is that far too few, the investigators chiefly, have viewed these treasures of the mine. The second grave consideration is that these treasures have been found but are still in the ore. They need to be made the coin of the realm, the legal tender of educational technique. Edison, after he had found a filament which would burn for the electric light, worked a long time to make his product commerciable so that all might have it. An outstanding need in the field of education just now is the sorting out, the interpretation, and the practical application of the implications from educational research. This is the main purpose of the Work Book Syllabus as applied to Principles of Education for undergraduate students.

2. More definite requirements should be made of college students than has been the practice in education courses. This course is arranged so that students have definite things to do. There is an outcry ramp-

ant generally to the effect that college students do little studying, particularly in such fields as sociology, economics, education, that is, in the more indefinite social fields. The author feels that students in general do not spend as much time in these fields as they do in chemistry, mathematics, physics, and Latin. Probably the chief reason why they do not, is because they do not have definite problems to meet. They would probably double their efforts if they had definite problems set for them. Dr. C. O. Davis, in a recent quinquennial study of the North Central Association, found that high school pupils would do the things the teachers required of them. The same is true of college students. If standards of scholarship are low in colleges and universities, it is due in no small measure to the faculty. They fail to make definite requirements. Students of all ages like something definite. Several experimental studies have shown that students like mathematics because it is definite. The author believes students of education should have definite problems to attack. He hopes this Work Book Syllabus will help many teachers by providing definite problems.

3. There exists in principles of education at the present time a body of material which should be taught. These materials have been sifted, psychologically arranged, and unified around certain large points of view so as to orientate the student in the field as a whole. These materials are the accumulation, the social inheritance of a long period of development in education. But particularly do they represent significant accretions in the last two or three decades. It is the opinion of the author that a student cannot know modern education, nor have a basis for

teaching in or administering a modern school without a sensitiveness to the major problems in the Work Book Syllabus. An intelligent sensitiveness rather than a "platter solution" should be the goal in the case of many problems as indicated below.

4. An undergraduate college course in education should be organized in terms of units. A unit is a comprehensive aspect of the field studied and embraces those materials necessary for the securing of a particular "adaptation." In this Work Book Syllabus there are twenty units. The first unit is "Individual Differences." The "adaptation" desired in this unit is that the individual secure a fundamental understanding of the concept of intelligence with a view to making adjustments in school organization, curriculum, and method. The unit on "Physiological Basis of Learning" is designed to secure the "adaptation" that learning goes on in the nervous system, that learning is modification of the nervous system, that "Individual Differences" reduced to lowest terms has its basis largely in the nervous system. Materials are included under these various units which seem necessary for securing these desired "adaptations."

5. In general the approach in each unit is from the non-technical to the technical, from the lay conception to the scientific conception, from the broad and general to the particularized. In most units the psychological principle of the "shock absorber" is employed, that is, the easiest problems come first in the unit. Illustrations are selected, as shown later, which are within the understanding and experience of students. The principle underlying the plan of gradual induction may be illustrated by the following analogy. A university class composed of juniors begins in Septem-

ber. During the first week a young man sees across the aisle a young woman who is interesting to him. It may be because of intellect, or beauty, or personality, or what not. On dismissal of the class a few days later, he happens to go out at the door at the same time she does. He passes a casual remark with her and they walk away together. As time passes they have other casual walks from the class together in this way. Later they have other walks together in the evening,—sometimes in the moonlight. After a time the young man is ensnared and enclutched. He will cross continents, climb mountain peaks, brave the sands of the desert, in order that he may win the goal.

This has been a case of gradual induction par excellence. Suppose the young lady had said that first day, "Young man, if you expect to enjoy my company, you must entertain me fully. You must have a car; it must not be a Ford. You must take me to dinner each Sunday to the best hotel in this city, etc." The young man would not have been enthusiastic. And yet college teachers not infrequently come into their classes and say authoritatively, "I want you people distinctly to understand this is going to be a hard course. You must work or you can't get by. You will think you have done something if you pass this course." *Horribile dictu!* Purposeful activity stimulated through meaningful problems is probably the most significant idea in modern teaching.

6. The function of teaching is to secure adaptations. Dr. H. C. Morrison, in one of the best books written in a decade, "The Practice of Teaching in the Secondary School," indicates that the first question which should be asked by any teacher in present-

ing a unit of work in any field should be, "What attitude or ability am I trying to bring about in my students?"¹ Too many teachers, as Morrison points out, think in terms of isolated phases of the "attitude" or "ability" rather than in terms of the attitude itself. The tendency to mistake a phase of the process for the "attitude" itself is shown in the case of a boy learning to swim. The father of the boy inquires of the swimming teacher, "How is my boy getting on in swimming?" The teacher says, "He can put his hands into the water and make ten strokes." The father does not know from this reply whether the boy can "swim" or not. The father wants to know if his boy can "swim." The boy might be able to make twenty or a hundred strokes and still not be able to "swim."

The fundamental idea applicable to this case of motor learning applies to all teaching. We are interested in the "adaptation." Too many times in our teaching and in our measurement in examinations, we measure not "adaptations" but "lesson performance." "Lesson performance," in terms of the swimming illustration, means the making of a stroke. The "lesson performance" attitude among students is indicated by such attitudes as the following:

1. That's what it says in the book.
2. What do I do next?
3. How much ground do we cover?
4. How much time do we spend on this?
5. The "con" and "recite" attitude.
6. Am I going to "pass"?
7. Thank goodness, I am done with this course!

¹ Morrison, H. C. "The Practice of Teaching in the Secondary School." University of Chicago Press, 1926, pp. 19.

The author is thoroughly sold to the fundamental principles of the Morrison technique. They have been applied to the arrangement of this Work Book Syllabus to a very significant degree. A student who has made the "adaptations" in the various units of the course should be able in school situations later to use the abilities or attitudes secured. This is the functional test of an "adaptation." Can and does the individual use the "adaptation" in an actual situation? The fallacy of mistaking "lesson performance" for "adaptation" is illustrated by Bernadine Freeman's brief but pungent treatise on the subject, "Is This Education?"

- I can solve a quadratic equation,
but I cannot keep my bank balance straight.
- I can read Goethe's "Faust" in the original,
but I cannot ask for a piece of bread in German.
- I can name the kings of England since the War of the Roses,
but I do not know the qualifications of the candidates in the coming election.
- I know the economic theories of Malthus and Adam Smith,
but I cannot live within my income.
- I can recognize the "leit-motif" of a Wagner opera,
but I cannot sing in tune.
- I can explain the principles of hydraulics,
but I cannot fix a leak in the kitchen faucet.
- I can read the plays of Moliere in the original,
but I cannot order a meal in French.
- I have studied the psychology of James and Titchener,
but I cannot control my own temper.
- I can conjugate Latin verbs,
but I cannot write legibly.
- I can recite hundreds of lines of Shakespeare,
but I do not know the Declaration of Independence,
Lincoln's Gettysburg Address, or the Twenty-third Psalm.

7. Functional teaching secures adaptations through consciously extricating facts, ideas, and principles

from the original matrix or setting in which they have been learned. It is obvious that for a fact, idea, or principle to be usable it must be torn out of its original setting. Otherwise, the "adaptation" cannot be made. Several years ago the author was a student in a class in educational psychology. The three volumes of Thorndike, "Educational Psychology," were used as a basic text. At the mid-semester period a new-type test was held on the first volume. One of the questions was: "In learning to swim, we should make abundant use of water wings." The question was to be marked plus or minus. The author at the time resented the question very much. Thorndike had not said anything about water wings, swimming, or anything else of that nature. But the author has changed his mind since that quiz and has decided that the teacher was thoroughly sound in his technique. In class he had emphasized the thesis, "We learn the reaction that we make, not something else." Hence, the question should obviously be marked minus, that is, in learning to swim with water wings we learn to swim with them, not without them. This teacher understood that to be usable the principle had to be isolated from its original matrix.

To illustrate again: The older type of teaching would ask, "What is the difference in longitude between New York City and Los Angeles?" The new-type of teaching asks, "A radio concert is broadcast in New York City at 8 P.M. Eastern Standard time. At what time will it be heard in Los Angeles?" The latter method extricates the idea from its setting; the former does not.

A few years ago a student in one of our large universities took three courses: finance, American History,

economics. He studied about Alexander Hamilton in each course, and at the end of the semester wrote a very satisfactory paper in each course in which he dealt with the brilliant American. A careful scrutiny of the three papers, however, revealed the fact that he did not know Hamilton was the same man in each course. Hamilton had for him simply fitted into a particular niche which was to be "learned" and written out at the time of the examination.

Ben Wood has said, "An examination should test knowledge of an ability to think in the materials of a course." If this is true then methods of teaching should be such that thinking in the materials of the course will be done. To be able to think in the materials of the course the student must be able to extricate an idea, fact, or principle, from its original matrix. The problems in this Work Book Syllabus are arranged consciously to lead the student to do this. To promote this "extrication" the questions are deliberately arranged in no logical or topical order, nor are references given in terms of specific questions. For the student to know that in Terman's "Measurement of Intelligence," page 6, line 10, he will find the answer to problem 12, and so on with the other problems, would destroy one of the main purposes for which this Work Book Syllabus has been prepared,—namely, intelligent problem teaching.

8. Purposeful activity on the part of students is secured maximally through problem teaching. All the world loves a problem. Witness the rush for cross-word puzzle books, "ask-me-another" compilations, and various other purposeless contrivances. The author submits this question, "Why cannot people in general and college students in particular

be interested just as much in real problems as in aimless cross-word puzzles?" The author believes they can be and are interested in the right kinds of problems. He believes if the average college student is not interested, the fault lies in how he is taught.

When do we do thinking? We do thinking when we come up against a situation for which there is not already a solution in the nervous system. More briefly, when we come to the crossroads and do not know which turn to make. The chief function of the teacher outside of the routinized techniques is to place students at the crossroads. Hamlet said, "To be or not to be, that is the question." He had two courses: one to live, the other to kill himself. The master teacher in the field of problem-solving is one who is continuously reducing his materials to the form of Hamlet's soliloquy, "To be or not to be." As one student remarked under a certain teacher, "We just have to think in that class."

Suppose the teacher asks the question, "Does practice make perfect?" What is the immediate reaction of a student? Yes, of course. We have always believed that; we have always been taught that. But the teacher suggests the statement may not be true. Here is a challenge. After some consideration the youth will admit that in athletics he may go on practicing forever with incorrect form and never become efficient. He may become more perfect in error. Thus it is shown that, "practice makes perfect" is only a half truth. Practice tends to make permanent, but perfect only with the right technique. *Probably a teacher's greatest function is to present challenges to students and to help them to move away from the crossroads.* The teacher who can do

this is training his students in thinking. A simple thing in one sense, yet in another very complex. It means that the teacher must be thoroughly familiar with the data, must be able to see issues, that is, crossroads, and be able to make it seem worthwhile to the students to move away from the crossroads. The student must see a desirable goal at the end of one of the intersections.

About two decades ago Stockton published a short story entitled, "The Lady and the Tiger." It was the story of a low-born hero who fell in love with a princess whose love was returned. The king did not take kindly to such a match. He had the young man placed in the arena, with instructions for him to open either one of two doors at the side of the arena. If he opened one door a woman would come out whom he would be compelled to marry; if he opened the other, a tiger would come out by whom the young man would have the pleasure of being devoured. The princess was in the balcony of the arena. She knew the key to the doors. She could give her lover the signal which she desired. Stockton closes the story by the question, "What signal did she give, the 'lady' or the 'tiger'?" Did the princess want the other woman to have the man she loved? On the other hand did she want the man she loved killed? It was a question of love vs. jealousy. An eighth grade teacher who had assigned this story to her class, heard one pupil remark just before the recitation, "I read every line about the princess several times trying to find out just what she would do." The author knows of no better piece of teaching than this. College students are the most eager group in the world to attack bristling problems when those

problems are clear, and definite, and meaningful. In this Work Book Syllabus the author "sets" the problems, puts the students at the crossroads, and leaves the choice to him in terms of the data.

9. The organization of the Work Book Syllabus presumes that the class discussion or socialized procedure will be used. The teacher is the guide and the leader of the discussion. Only one person should be permitted to speak at a time; all discussion should go on via the teacher, that is, no student speak until recognized by the teacher.

It is the students' reactions in terms of the examination of the data, in which the teacher should be interested. The socialized class discussion procedure should presume that, "My students have an unquestionable right and equally an unavoidable obligation to contribute everything within their power toward the education of their classmates." A short time ago the author was visiting a college classroom one day. The teacher asked a student a question. The student began a sentence, finished half of it, stopped, and asked, "Is that what you want?" In my opinion, the teacher should have said, "I don't want anything; I am interested in your reaction." The question was not one of absolute fact but of opinion or point of view. The master teacher under the plan of this Work Book Syllabus is one who is a master leader of discussion. This socialized class period should be characterized by the following phrases, if well conducted:

1. Student participation.
2. Solving of problems.
3. Questions by students, not in book.
4. Judging of relative values.

5. Informal discussion via teacher.
6. Teacher as leader, guide, stimulator.
7. Student initiative.
8. Student responsibility and cooperation. Group consideration.
9. The class period a place where the student is to "give" and "get."
10. Open-mindedness, non-authoritarianism.
11. Objective evaluation of data. Critical-mindedness.
12. Social setting; social emphases.
13. Freedom and spontaneity in ideas.
14. The student the center of gravity.
15. Self-expression.

The teacher in conducting this type of class discussion should guard against the following dangers:

1. Interest in process rather than in the problems.
2. Total neglect of dull student, or the modest student.
3. Monopoly of discussion by a few students.
4. Irrelevant discussion.
5. Failure to summarize and organize.
6. Glibness without thought on the part of students.
7. Authoritarianism of teacher.
8. Not enough emphasis on "getting" on the part of some students.
9. Personal criticism.
10. Discussion not via teacher.

The plan of the author in leading these discussions may be stated in the following way: A few students are permitted to be the "advance guard" in discussion. They are the brighter students. They throw in most of the original ideas. They are alert, keen, eager. They carry the discussion forward. Below this group is the larger part of the class which examines, judges, evaluates, the original suggestions of the leaders. Below this group, and at the lower end of the class, is a small group who are just function-

ing along. They are at the lower end of the group in ability, interest, and ambition. They are asked the easiest questions and those of the more routinized type. The author believes that by this procedure these three groups are maximally served, and also society as a whole. By this procedure, individual differences can be recognized in heterogeneous groups. With a slight change in emphasis, the author believes in the same plan for all types of teaching: college, high school, elementary school. The advantages of the plan are:

1. The bright pupils are recognized and permitted to function. They are not stifled.

2. The middle group functions in proportion to its ability.

3. The lowest group receives some stimulation from this type of question.

4. There is an air of victory, of stimulation about the class period.

5. The class is not held back unduly for the dull.

6. The dull student absorbs something from the discussion of the other students.

7. Individual differences are recognized. Students are given "equality" not "identity" of opportunity.

10. Good teaching does not eliminate fact teaching. Progress in education has been hindered to a significant degree by those who have blatantly cried, "We no longer need to know facts; we simply need to know where to find them." It is true that "a little learning is a dangerous thing" is just as true in the field of education as elsewhere. Thorndike, in his now famous essay, "Education for Originality and Initiative," shows conclusively that we need in education not fewer but more and better facts.¹ It is functional

¹ Thorndike, E. L. "Education for Originality and Initiative," *Teachers College Record*, Nov. 1927.

facts that we need. The author assumes a priori that at the present time there are certain facts which a prospective teacher ought to know. A prospective teacher ought to know, for example, what such concepts as "intelligence quotient," "mental age," etc. mean in our educational language. If he does not know these, he simply is not "educated" in "education."

11. The teacher should consciously keep in the foreground a few big problems and issues basic to the course as a whole. In the Work Book Syllabus certain fundamental principles have been deliberately repeated in different units. Significant problems and issues are frequently interpreted through illustration that reduces the whole scheme of thinking to a simple basis. The specific illustration may be used as a key to a whole field or point of view in thinking. The retention of the key by the student unlocks at any time the door to the whole field or point of view. The "Ape and the Banyan Tree," under the unit "Individual Differences," is representative of this type of illustration. It brings definitely into the clear the issue of heredity and environment. In addition to choosing illustration for carrying fundamental points of view, the following principles have been kept in mind in the choice of illustration:

1. Illustration which illustrates, that is, the application of which is clear.

2. Illustration chosen from the commonplace things in life but given a poignant slant. This type has been used much for three reasons: It is in the experience of the student; its application is usually clear; it is interesting in that it gives a new turn to the old or familiar.

3. Illustration which possesses subtlety.

4. Illustration which is in touch with the modern spirit of youth. We cannot turn back the clock. Students are living life now; they are not functioning in a medieval manor, but in a modern democracy. They love illustration from their throbbing world.

12. Dogmatic answers or solutions to all problems are not expected. It is an intelligent awareness of or sensitiveness to the problems that is desirable. When the problem is well examined and the issue clearly defined through discussion, the individual student at the close should have his respective slant on the problem. No attempt should be made to compel final agreement. The author believes the teacher should usually indicate non-dogmatically what his own point of view is in the light of available data. The teacher should frequently close a problem with the statement, "We have not settled this problem, but the issue is very clear to us." A colleague said to me recently, "The best course I took as a student was under Professor Blank. I did not agree with him nor with the majority of the class on many points. But certain issues were brought clearly out in the open. I thought much about them then. I have been thinking about them ever since." The author believes one who can stimulate thinking like that should qualify in the role of "master teacher."

13. It is the responsibility of the teacher to sell his course. The phrase "selling education" has been used so much in recent years and in such undignified relationships that to many educators it has an unwholesome connotation. But rightly conceived, the author believes it is the legitimate right and duty of the teacher to "sell" his materials to the students through his methods of instruction. As a freshman

in the university, the author well remembers a certain teacher of history. He was a tall, gaunt, hollow-eyed, serious-looking man. At the beginning, the author expected a wretchedly uninteresting course. But this man by his plus knowledge, his unusual illustration, his intimate and close-up pictures from the lives of great characters, made history live in the lives of those college freshman. Mary Queen of Scots, Elizabeth, Henry the Eighth, were characters of flesh and blood so that one felt they would bleed if he should prick them with a pin. In the class were some serious-minded students—future Phi Beta Kappas; there were average students; there were others who were just going to college. All loved this course. The teacher “sold” this course to them and the author believes legitimately. Outside of his own interesting personality, he did it through his psychological selection and presentation of materials. His choice of illustration was a great “selling” agency. The students “raved” about the course being so interesting and so profitable. Few courses are interesting or uninteresting in themselves. The guidance of the teacher makes them one or the other. The author believes the teacher has the legitimate right to “sell” his courses through making them interesting. This interest must come, as Dewey points out, from the materials themselves and not from artificial, sugar-coated sources.

In the same university and at the same time as indicated above, the author was taking a course with another teacher. He was one of the great authorities in this country in his field. In this class occurred nothing more nor less than the cold, dead, unemotional presentation of cold materials. The best

students admired him and marveled at his scholarship; to others the course was as dry as dust. In the opinion of the author, this teacher was failing to "sell" his course.

The teacher must "sell" the curriculum and methods of instruction continuously. Many teachers fail to recognize the importance of this fact. Practically all teachers recognize that first impressions are important. Many of them "sell" their course the first day or the first week and then imagine it sold forever, and inevitably ease up on their salesmanship. It cannot be done that way. The teacher must "sell" his course the first day and the first week and the first month; he must also "sell" it the second day and the second week and the second month, and then keep on "selling" it throughout the term.

14. The bibliography has been carefully selected with reference to each particular unit. The three chief criteria considered correlatively in its selection have been:

1. How will the material contribute toward the "adaptation" desired in the unit?

2. Accessibility. The first ten references under each unit should be found in all libraries attempting to do work in education.

3. Probable interest to the student.

The bibliography under each unit is not arranged alphabetically but on the basis of meeting these three criteria. The references are chosen in their relation to the unit. The fact that a reference comes last on the list does not mean that the article is not a good one. It simply means this is the author's appraisal of it in terms of the particular unit.

It will be observed that certain major works run through almost all the units: Douglass, Uhl, Chapman and Counts, Inglis. This enables the student to have a greater degree of continuity to his study, also to associate certain fundamental points of view with a few leaders in the field. The author believes this is desirable. The plan enables a single teacher or a group of teachers to do a large part of the work with a small library.

The author believes placing the bibliography in the hands of the students at the beginning of the term has many advantages. By thumbing over these men again and again they come to be familiar characters. Also the student is enabled to work at his own rate of speed and at times most convenient for him.

The references become more significant in terms of the solution of problems. The great value of a reference reading is lost when it is not in terms of an "adaptation" to be made, a problem to be solved. The teacher can revise the lists as new references become available.

UNIT I

INDIVIDUAL DIFFERENCES

1. Thomas Gray, the great English poet, came near the close of a summer's day to the corner of a cemetery over in Old England. It was just at the twilight hour and all was sombre and quiet. As Gray looked upon those rows of graves with a scattered mound here and there, he became retrospective. He wrote the "Elegy in a Country Churchyard." In that gem of literature he said, among other things, "Full many a flower is made to blush unseen and waste its fragrance on the desert air."
Was Gray right?
2. Lester F. Ward, in his *Applied Sociology*, says, "Many a mute and inglorious Milton goes down to the grave unhonored and unsung because of the lack of opportunity to blossom."¹
Is Ward right?
3. Some time ago it was my privilege to hear the great Russian baritone, Chaliapin. Before the program began little booklets were distributed which contained snatches from the life and character of the great artist. One story was as follows: When Chaliapin was but a little boy he was singing one day in a little insignificant city. As he sang, a king rode by and heard that voice. He called Chaliapin to him and said, "My boy, who are you?" The boy replied, "I am Chaliapin of a certain little city," which he named. The king said to him, "I will make you Chaliapin of the world." And so he is today. On the operatic stage, Chaliapin stands supreme.
Suppose the king had not come by.
4. When I was a small boy I learned from my parents and teachers and others that Abraham Lincoln figured on the

¹ Ward, Lester F. "*Applied Sociology*," Ginn, 1906. Part 2.

shovel before the open fireplace of the log cabin. I was led to believe as a boy that Lincoln became the great man that he was because as a boy he passed through those hardships of early days. I was also led to believe that if a young man would become great today he should get out an old shovel and begin to figure on it a little bit.

Evaluate this point of view.

Many of you have seen in the movies the play "Abraham Lincoln." At the beginning of the play, coming out of a very beautiful halo or background, these words are flashed on the screen: "Here is the story of a boy who with poor opportunities, and *without superlative genius* reached the highest position which the nation had to give."

Do you agree with the above statement?

5. A short time ago Chaliapin wrote a series of articles for the LADIES HOME JOURNAL. He mentions two facts as follows:

1. When Chaliapin was but a small boy he was alone one evening with his mother in the old thatched cottage. In the quiet stillness of the twilight hour he heard his mother sing. As he heard that magnificent voice with its compelling charm, Chaliapin himself says, "I knew I was condemned to sing."
2. Chaliapin as a poor young man at one time worked with a gang in towing a boat along the River Volga. All of the men had the tow ropes fastened with a kind of harness to their backs. As they towed the boat together in the nighttime they would call out in rough cadence, "Heave, ho; heave ho." Chaliapin himself says that now when he sings the famous boat song on the stage of the Metropolitan in New York, he imagines he is back once more on the Volga. He can feel the harness on his back and re-lives the scene otherwise.

Suppose Chaliapin had never heard his mother sing. Suppose he had never towed a boat on the Volga.

6. Suppose that an hundred years ago there lived along the Atlantic seaboard a young married couple both of whom were great musical artists. As the great Westward Movement came along, this family, for reasons which we

do not know, moved into the mountainous region of Kentucky. Between the mountain peaks they settled and became lost to the world's civilization outside. Suppose a boy is born to these two great artists of surpassing genius. The parents go about their work from day to day hunting and fishing and leading the simple life. The parents never say anything about music to the boy. There are no musical instruments there. What will become of this boy? Will he grow up, lead the simple life, and die in obscurity?

7. Does supreme genius will out?
8. Stuart Pratt Sherman, in his book, "The Genius of America," tells the following story:¹

"A good many ages before Rome was founded, or Athens, or Ancient Troy, or Babylon, or Nineveh, there was an umbrageous banyan tree in India, in whose wide-spreading top and populous branches red and blue baboons, chimpanzees, gorillas, orang-outangs, and a missing group of anthropoid apes had chattered and fought and flirted and feasted and intoxicated themselves on cocoanut wine for one-thousand years. At some date which I can't fix with accuracy, the clatter and mess and wrangling of arboreal simian society began to pall on the heart of one of the anthropoid apes. He was not happy. He was afflicted with ennui. He felt striving somewhere in the region of his diaphragm a yearning and a capacity for a new life. His ideas were vague; but he resolved to make a break for freedom and try an experiment. He crawled nervously out to the edge of his branch, followed by a few of his friends, hesitated a moment; then exclaimed abruptly: 'Here's where I get off,' dropped to the ground, lighted on his feet, and amid a pelting of decayed fruit and cocoanut shells and derisive shouts of 'precisian' and 'hypocrite' walked off on his hind legs into another quarter of the jungle and founded the human race."

Why did the old boy get out of the banyan tree?

9. If Lincoln had been born among the Kickapoo Indians would he have become a Kickapoo chief?

¹ Sherman, Stuart Pratt. "The Genius of America." Scribners, 1923. pp. 53.

10. Does a supreme genius hear a kind of bug singing in the ear, a bug which cries out for larger expression? Did Lincoln hear the bug? Did Chaliapin? Did the ape?
11. Suppose Lincoln had been born and then left alone on the Sahara Desert. What would have happened?
12. Discuss: "The man selects the environment, and the environment selects the man."
13. Can the environment create ability?
14. Would Napoleon be great if he were living now? Would Lincoln?
15. Have geniuses ever been dullards?
16. Is the mind of an individual a "tabula rasa" when he comes into the world? Do ten newly born infants have equal capacity to learn?
17. How would the average intelligence of ten children on Riverside Drive in New York City compare at the time of birth with the average intelligence of ten on the East Side?
18. Discuss: "You can't make a silk purse out of a sow's ear."
19. Two athletes of unequal ability in the mile run get farther apart the farther they go. Is the same true in the mental field?
20. Discuss: "The nature of the individual is determined at the time of the union of the ovum and spermatozoon."
21. Are men and women equal in mental ability?
22. Some time ago I was riding on a street car with a young man who was thinking of going to college. He saw the conductor wearing a Phi Beta Kappa key. He turned to me and remarked, "If college means that, no college for me."
Evaluate.
23. What is Galton's regression theory?
24. Do children on the average have more intelligence than their parents?
25. Compare the innate intelligence of the average man who walked along the Elbe in the time of Tacitus with that of the average man of today.
26. Discuss the influence of "variation" and "selection." Will a breed of dogs survive today which cannot dodge automobiles?
27. How has civilization reached its present status?

34 SYLLABUS IN PRINCIPLES OF EDUCATION

28. Do the children of college parents on the average have greater innate intelligence than the children of non-college parents?
29. What is meant by the "non-transmissibility of acquired traits"?
30. Discuss: "Native ability sets limits beyond which the individual cannot go."
31. Discuss: "Intelligence does not consist in ready-made native reactions."
32. Discuss the native and acquired intelligence of the "Tarzan Ape."
33. How does war affect the biological heredity of the race? How was the South affected during the Civil War? How has Russia recently been affected?
34. Compare the average intelligence of the American farmer with the French peasant.
35. Discuss Thorndike's statement: "The most important question is, who is being born."
36. What is meant by the "normal curve of frequency"? Explain how it came originally from the field of biology.
37. Is there any correspondence between an individual's position on the "normal curve" of intelligence and the "normal curve" of success?
38. The following statements are from Lothrop Stoddard's book, "The Revolt against Civilization."¹ Evaluate them:

1. "We thus see that, as civilization progresses, inborn superiority tends to drain out of the lower social levels up into the higher social classes. And probably never before in human history has this selective process gone on so rapidly and so thoroughly as today."
2. "Once a stock has been thoroughly drained of its superior strains, it sinks into permanent mediocrity, and can never again either create or support a high civilization."
3. "In all these social revolutionary phenomena there is nothing essentially novel. There is always the same violent revolt of the unadaptable, inferior, and

¹ Stoddard, Lothrop. "The Revolt against Civilization." Scribners, 1923. pp. 19, 86, 142.

degenerate elements against civilized society, in atavistic reaction to lower planes."

4. "The UNDER-MAN is unconvertible. He will not bow to the new truth because he knows that the new truth is not for him. Why should he work for a higher civilization when even the present civilization is beyond his powers? What the UNDER-MAN wants is, not progress, but regress—regress to more primitive conditions in which he would be at home. In fact, the more he grasps the significance of the new eugenic truth, the uglier grows his mood. So long as all men believed all men potentially equal, the UNDER-MAN could delude himself into thinking that changed circumstances might raise him to the top. Now that nature herself proclaims him irremediably inferior, his hatred of superiority knows no bounds. The UNDER-MAN revolts against progress. Nature herself having decreed him uncivilizable, the UNDER-MAN declares war on civilization."
39. Evaluate McCall's statement: "Those on the borderline of intelligence will be the hewers of wood and the drawers of water."
40. The biologist Davenport says: "At the present rate of reproduction 1000 Harvard graduates 200 years hence will have 50 descendants; 1000 Rumanians in Boston 200 years hence will have 100,000 descendants." Evaluate Davenport's statement, and indicate significance. Should this statement, if true, affect in any way our immigration policy?
41. Do you favor a cold, competitive, scientific, policy in dealing with the less favored classes; or do you favor a thorough-going humanitarian policy; or a combination of both of these?
42. Name some gifted children. Are gifted children abnormal in traits other than intelligence?
43. Do "common or unskilled" laboring groups have a fair percentage of children in high school?
44. Miss Hempleman, Jackson, Michigan, tells of the following experience with her class in botany. Is this situation typical of life situations generally?

"On the occasion of a field trip when she had taken her pupils into the country to observe various phenomena in connection with the work, when the children were called together to observe some object or to listen to the teacher's explanation, the pupils on their own initiative grouped themselves about her in three more or less distinct rings. The inside ring, or the one closest to her, was composed of the bright children; beyond them were the average children; on the outskirts of the group were those who were dull. Some of these last had wandered off in some other direction." Do dull children tend to take rear seats in a classroom when they have their own choice?

45. In a critical symposium a short time ago, the following definitions of intelligence were given. Evaluate each:

1. PINTNER—The ability of the organism to adjust itself adequately to relatively new situations in life—the capacity for getting along well in all sorts of situations.
2. THORNDIKE—The power of good responses from the point of view of truth or fact.
3. Terman—An individual is intelligent in proportion as he is able to carry on abstract thinking.
4. COLVIN—Capacity to learn. Mental adaptability to the environment.
5. HENMON—Intellect plus knowledge.
6. BUCKINGHAM—Capacity to learn.
7. HAGGERTY—Intelligence does not denote a single mental process capable of exact analytical definition.
8. FREEMAN—Intelligence is not a specific enough term to be used for results of tests. Use brightness. Tests do not really measure intelligence.
9. RUMML—The nature of intelligence is indebatable at the present time. There is too great lack of precision in terms and concepts.
10. PRESSEY, S. L.—I am not interested in defining intelligence nor what it is, nor what kinds of material are best for testing it; I am interested in finding what such tests will do in solving this or that problem.
11. DEARBORN—Theoretically, the best way to measure intelligence is the actual measure of progress in representative learning.

46. What three types of intelligence are suggested by Thorndike?
47. Is it correct to say that an adult of low intelligence has the mind of a child?
48. Explain the difference between Thorndike's and Spearman's theory of intelligence.
49. Does intelligence develop gradually or irregularly?
50. Woodworth gives as general factors in intelligence the following:

1. Past experience—retentiveness.
2. Responsiveness to relationships.
3. Persistence.
4. Curiosity.

Explain.

51. What is a special aptitude? Is it inherited or acquired?
52. What is meant by the statement: "Intelligence matures at about 16 years of age"?
53. Show how the late Presidents, Wilson and Harding, represent two distinct types of intelligence and personality.
54. Does greater intelligence go with larger brains?
55. What does Terman mean when he says, "The eccentricity of genius is largely a myth"?
56. What is meant by the "mental stride" of a pupil?
57. Define "mental age." What is its function? Does it tell anything about the brightness of a child? How is it found? Who gave definite shape to the concept?
58. Define "intelligence quotient." What are some of its uses? What is the formula? Does it change?
59. What does it really mean to say that a child has an I. Q. of 125?
60. How do you compute the I. Q. of an individual of mature years?
61. Indicate the proper numerical I. Q. values after each of the following in Terman's classification:
Genius or near genius.....
Very superior.....
Superior.....
Average.....
Dullness.....
Borderline.....
Definite feeble-mindedness.....

Morons:.....

High

Middle

Low

Imbeciles.....

Idiots.....

62. Define "educational age."

63. What are the formulae for:

1. I. Q.?

2. E. Q.?

3. A. Q.?

Explain each.

64. Should pupils be marked in their school work on the basis of A. Q.?

65. How is the reliability of a test determined?

66. What is meant by the objectivity of a test?

67. Discuss Terman's statement, "The I. Q. is the most important thing next to character."

68. What is meant by an "inflated I. Q."?

69. Discuss Colvin's statement, "For a test to be fair, the subjects must:

1. Have had equal opportunity to learn.

2. Have equal interest in the test."

70. Woodworth mentions the following limitations of intelligence tests:

1. Do not measure ability to handle concrete things.

2. Do not measure executive ability or ability to handle people.

3. Do not measure big ideas.

Discuss.

71. Do intelligence tests measure the sum total of personality?

72. Intelligence tests are usually made up of the following types of material. Illustrate each:

1. Arithmetic.

2. Following directions.

3. Information.

4. Disarranged sentences.

5. Analogies.

6. Number series completion.

7. Absurdities.

8. Practical judgment.

73. What is the best intelligence test that has been devised?
74. Give the following data relative to Binet:
 1. Who was he?
 2. Where did he do his work?
 3. What was his original problem?
 4. Explain the method used in the development of his scale.
 5. Who revised Binet's test? Where? When? Method?
 6. Explain these characteristics of Binet's test:
 - a. Age standards.
 - b. Many processes.
 - c. Complex processes.
 - d. A general test.
75. Who were some of the forerunners of Binet?
76. Who are some of Binet's successors?
77. What is meant by "group testing"? Sketch briefly its growth and present status.
78. Indicate several characteristics of a good intelligence test.
79. Indicate several uses of tests in high school.
80. What are performance tests? Name some.
81. What tests have been devised by each of the following?
 1. Downey.
 2. Voelker.
 3. Chassell.
 4. Coe.
 5. Pressey.
 6. Rugg.
82. Distinguish between intelligence tests and achievement tests.
83. How is a test standardized?
84. Discuss: "The intelligence tests are more successful in locating the backward and the superior child than in differentiating the average ones."
85. Discuss: "Too great stubbornness may hinder a score on an intelligence test."
86. Does the I. Q. tell in what grade a child belongs?
87. How many men were tested in the American army during the Great War?
88. Discuss this criticism of intelligence tests: "They measure only a few things and average them."

LIBRARY OF
DAVIDSON COLLEGE

40 SYLLABUS IN PRINCIPLES OF EDUCATION

89. What is the difference between a "point" scale and a "mental age" scale?
90. Discuss: "A test should be so easy that all pupils will make some score and so difficult that no pupil will make a perfect score."
91. Why was the Binet test not used for army testing?
92. Discuss: "Although two pupils may have the same mental age, their I. Q.'s or rates of learning may vary over forty points. The result might be likened to a race between a thoroughbred and an ordinary saddle horse. Although at a particular time in the race, they are neck and neck, they are travelling at different rates, and so this equality is but momentary."
93. What is meant by the phrase "educational determinism"?
94. What should be done with the dull child?
What should be done with the superior child?
95. Should each child in a class of forty have the right to recite an equal amount of time or answer an equal number of questions?
96. Distinguish between "vertical" and "horizontal" learning as the terms are used by Bagley.
97. Are intelligence tests democratic?
98. Is this a good philosophy of education: "All should have education to the extent they are able to receive it"?
99. Should children know their exact I. Q.?
100. Are superior children usually over-estimated or under-estimated by their teachers?
101. Explain these kinds of ages:
 1. Chronological.
 2. Physiological.
 3. Pedagogical.
 4. Educational.
 5. Psychological.
 6. Social.
102. How does the "Parable of the Ten Talents" apply to this unit?
103. How does the average I. Q. of the seniors in any high school compare with the freshmen?
104. Discuss: "Recognizing that individuals possess certain capacities, education becomes a piece of human engineering."

105. Approximately what I. Q. is required for graduation from high school?
106. What is meant by the "lock-step" in education?
107. What is meant by "individualized instruction"? Where is the plan used?
108. Do you agree with the following conclusions of Terman from his study of superior children?¹
 1. That intellectually superior children are apparently not below the average in general health.
 2. That in the vast majority of cases their ability is general rather than special or one-sided.
 3. That the superiority is especially marked in moral and personal traits.
 4. That "queerness," play deficiency, and marked lack of social adaptability are the exception rather than the rule.
 5. That while superior children are likely to be accelerated on the basis of chronological age, they are usually two or three grades retarded on the basis of mental age.
 6. That their school work is such as to warrant promotion in most cases to a grade closely corresponding to the mental age.
 7. That the superiority tends to show early in life, is little influenced by formal instruction, and is permanent.
 8. That superior children usually come from superior families.
109. What does Terman mean when he says, "The solution for the gifted lies in enrichment of the right kind plus acceleration"?
110. Terman asked the following question some time ago. How would you answer it? "A group of 500 pupils of 80 I. Q. are taught during their school careers by the very best teachers in a large school system. A second group of 500 pupils of 120 I. Q. are taught during their school careers by the very poorest teachers in the same system. From which group would you expect to come the greater

¹ Terman, L. M. "The Intelligence of School Children." Houghton Mifflin, 1919. pp. 193.

42 SYLLABUS IN PRINCIPLES OF EDUCATION

number of college graduates, successful men of the world, etc."?

111. What is the statistical meaning of correlation? Explain positive, negative, and zero correlations.
What should be the correlation between two good intelligence tests?
112. Is there a positive or negative correlation between desirable traits?
113. Is there a positive correlation between wealth and I. Q.?
114. Assign approximate I. Q.'s. to the following historical characters.

Your estimation is to be made upon the basis of what you already know or can find out about them.

1. John Stuart Mill.
 2. Goethe.
 3. Leibnitz.
 4. Grotius.
 5. Coleridge.
 6. John Q. Adams.
 7. Mme. de Staël.
 8. Byron.
 9. Michael Angelo.
 10. Beethoven.
 11. Napoleon.
 12. Washington.
 13. Lincoln.
 14. Raphael.
115. Suppose you were employing a street car conductor.
Would you prefer one with an I. Q. of 95 or 165?
 116. Should a stenographer have a high I. Q.?
 117. Should a waitress have a high I. Q.?
 118. Discuss the relation of I. Q. to vocational education. To educational and vocational guidance.
 119. Discuss the relation of I. Q. to the following, in the case of high school pupils:
 1. Teachers marks:
 1. Academic.
 2. Vocational.
 3. Artistic.
 2. Retardation.
 3. Elimination.
 4. Teacher's estimates of intelligence.

5. Chronological age.
 6. Social status; home conditions.
 7. Standard educational test scores.
 8. Attendance.
 9. Grade progress.
 10. Leadership.
 11. Emotional and moral reactions.
 12. Participation in extra-curricular activities.
 13. Interest in school subjects.
 14. General interest in everything.
 15. Alertness.
 16. Ambition.
 17. Asking of questions.
 18. Command of English.
 19. Independence of judgment.
 20. Reasoning powers.
 21. Sense of humor.
 22. Power of concentration.
 23. Conscientiousness.
 24. A. Q.
 25. Dependability.
 26. Physiological age.
 27. Self-criticism.
 28. Health.
 29. Court record.
 30. Power of adjustment.
 31. Educational age.
 32. Elementary school record.
 33. Social age.
 34. Reading ability.
 35. Industry.
 36. Interest in ideas and theories.
 37. Initiative.
 38. Apperceptive mass.
 39. "Lesson-learning" attitude.
 40. Penmanship.
 41. Discipline.
120. What is your reaction to the following taken from Thorndike's report of a study by Rosanoff and Orr?¹

¹ Thorndike E. L. "Educational Psychology," Teachers College, 1913. Vol. 3, p. 253.

44 SYLLABUS IN PRINCIPLES OF EDUCATION

"In connection with the Vineland Institution for the care and education of mentally deficient children, investigations into the antecedents of these children have been made. The inquiry in the case of Deborah K. led back in five generations to a man of good ability who had an illegitimate son Martin by a girl recorded as feeble-minded. Martin married a woman recorded as normal and had nine children, five recorded as feeble-minded, two as normal, one unknown and one who died in infancy. The five feeble-minded children, contracting marriage or illicit unions with individuals of low intellectual power, gave rise to a brood of incompetents who in turn often bred others like themselves. The result in the great-grandchildren of the five, and in the offspring of these, is a horrid array of human incompetents. From this illegitimate son Martin, have come four hundred eighty descendants. One hundred forty-three of these, we have conclusive proof were or are feeble-minded, while only forty-six have been found normal. The rest are unknown or doubtful. Among these four hundred eighty descendants thirty-six have been illegitimate. There have been thirty-three sexually immoral persons, mostly prostitutes. There have been twenty-four confirmed alcoholics. There have been three epileptics. Eighty-two died in infancy. Three were criminals. Eight kept houses of ill-fame."

121. Who were the Jukes? Compare with the Edwards family.
122. What should be our point of view in dealing with the problem of mental deficiency?

BIBLIOGRAPHY*

1. Douglass, A. A., *Secondary Education*, Chap. 8.
2. Chapman, J. C., and Counts, G. S., *Principles of Education*, Chap. 11.
3. Inglis, Alexander, *Principles of Secondary Education*, Chap. 3.
4. Thorndike, E. L., *Educational Psychology*, Vol. 3, Chap. 8.
5. Colvin, S. S., *Principles Underlying the Construction and Use of Intelligence Tests*, 21st. Yr. Bk. of the National Society for the Study of Education, Chap. 2.

* For complete bibliography see "*Reference Books*," page 152.

6. Woodworth, R. S., *The Psychology of Mental Life*, Chap. 12.
7. Gates, A. I., *Psychology for Students of Education*, Chaps. 17, 18.
8. Terman, L. M., *Measurement of Intelligence*, Part I.
9. Symposium—*Intelligence and Its Measurement*—Jr. of Educational Psychology, Vol. 12: 123-147 and 195-216.
10. Pintner, Rudolph, *Intelligence Testing*, Chaps. 1, 2, 3, 4.
11. Bagley, W. C., *Determinism in Education*, Chaps. 1-4.
12. Terman, L. M., *The Psychological Determinist*, Jr. of Ed. Research, June, 1922.
13. Terman, L. M., *The Possibilities and Limitations of Training*, Jr. of Educational Research, Dec. 1924.
14. Winsor, A. L., *The Relative Variability of Boys and Girls*, Jr. of Educational Psychology, May 1927.
15. Patterson, Donald G., and Langlie, T. A., *Influence of Sex on Scholarship Ratings*, Ed. Admn. and Supervision, Oct. 1926.
16. Strayer, G. D., and Norsworthy, Naomi, *How to Teach*, Chap. 10.
17. Thorndike, E. L., *Measurement in Education*, 21st. Yr. Book, National Society for the Study of Education, Chap. 1.
18. Terman, L. M., *The Intelligence of School Children*, Chaps. 1, 2, 6.
19. Davis, C. O., *Provisions for Meeting Individual Differences in the Junior High School*, School Review, Sept. 1926.
20. Bagley, W. C. and Keith, J. A., *Introduction to Teaching*, Chap. 8.

UNIT II

THE PHYSIOLOGICAL BASIS OF LEARNING

1. An aquarium has a glass partition. On one side of the partition is a hungry perch. A minnow is thrown in on the opposite side. What will happen? Why?
Suppose the experiment is repeated many times. What will occur? If the glass is finally removed, what will happen?
Suppose the experiment is discontinued for a month, and is then repeated with the same perch. What occurs now? Explain the various things which have occurred. Has the perch learned the situation? Does a perch have intelligence?
2. A hungry rat is placed in a complicated box. There are four avenues of escape each leading to food:
Route (1) contains a severe electric shock.
Route (2) contains a point where the rat is stopped and confined for a time.
Route (3) is a long circuitous pathway.
Route (4) is a short, unimpeded, passageway.
Explain what will occur as the experiment is repeated many times. Does the rat learn the situation? Does the rat have intelligence? If so, more or less than the perch? How would a man behave under similar conditions?
3. Suppose you proceed as follows with a group of four cats:
 1. To No. (1) you say, "Kitty, kitty." It comes to you. You caress it and give it some very palatable food.
 2. To No. (2) you say, "Kitty, kitty." It comes to you. You caress it but do not give it food.
 3. To No. (3) you say, "Kitty, kitty." You do not give it food and do not caress it. You sprinkle it with some drops of cold water.

4. To No. (4) you say, "Kitty, kitty." It comes to you. You do not caress it and do not give it any food. You douse it with a pail of cold water.

What will occur if this experiment is repeated? Are we as teachers continuously "caressing kittens"?

4. A six-months old baby next door has been spending the time recently from 9:00 to 12:00 in crying. The baby is pronounced by the physician and parents as physically sound and well. The parents now leave it in the crib and let the recital go on because they want to "break" it from crying.

Explain, in terms of the preceding discussions.

5. Can a cat be trained until it will permit a mouse to play around without molesting it?
6. What is meant by the "Stimulus Response Psychology"?
7. Discuss: "The stimulus response psychology presumes three things:
1. Stimulus.
 2. Response.
 3. A connection between (1) and (2) called a bond."
8. What is a nerve current? How fast does it travel?
9. A telephone system represents a good analogy for the nervous system. Indicate likenesses and unlikenesses.
10. What is a neurone? How is it like a link in a chain? Unlike?
11. Compare the passage of the current in the nervous system with the passage of the electric current on the electrostatic machine.
12. Discuss: "The learning ability of an individual depends upon his sparking ability." Explain how this statement reduces "individual differences" to lowest terms.
13. Discuss: "The sparking ability of two individuals at the age of 20 depends upon:
1. Original arrangement of neurones.
 2. Past experience (modification)."
14. Discuss: "The original arrangement of the neurones depends upon:
1. Distance between ends (including arborization).
 2. Permeability."

48 SYLLABUS IN PRINCIPLES OF EDUCATION

15. The following is an outline from Gates of physiological mechanisms concerned in learning.¹ Indicate briefly the functions of each mechanism.

I. Receiving mechanisms:

1. Eye
2. Ear
3. Skin
4. Tongue
5. Nose

II. Connecting mechanisms:

1. Central nervous system:

1. Brain
2. Mid-brain at base of skull
3. Spinal cord

2. Neurones:

1. Dendrite
2. Cell body
3. Axon
4. End brush

III. Reacting mechanisms:

1. Muscles:

1. Striped
2. Smooth

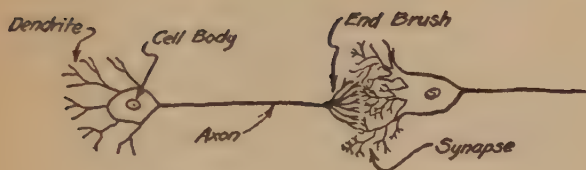
2. Glands:

1. Duct
2. Ductless

3. Cortical neurones concerned in states of consciousness.

16. The following diagrams reduce the learning process to lowest terms. They form a sound basis for a conception of the whole problem. Explain the diagrams:
17. What are the five parts of a reflex arc?
18. What are the three levels of reaction?
19. Give an illustration of reaction which shows fairly clearly the operation of the three levels successively?
20. Are there definite lines of demarcation between the three levels?
21. List eight characteristics of first level reactions.

¹ Gates A. I. "Psychology for Students of Education," Macmillan, 1923. Chaps. 2, 3.



(From Woodworth)

DIAGRAM I.—Showing passage of current from one neurone to another. (Reproduced by permission from R. S. Woodworth's "The Psychology of Mental Life," Henry Holt & Co., Publishers.)

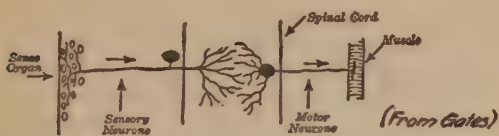


DIAGRAM II.—The synaptic connections are made in the central nervous system. Hence, we have the reflex arc as the simplest connection as shown above. (Reproduced by permission from Arthur I. Gates' "Psychology for Students of Education," The Macmillan Company, Publishers.)

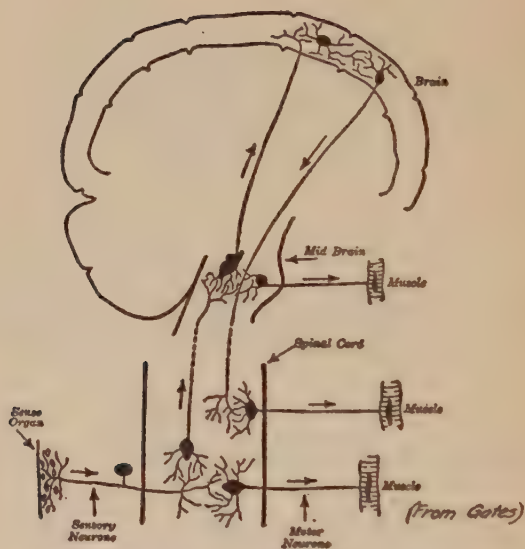


DIAGRAM III.—Showing reactions of three different levels. (Reproduced by permission from Arthur I. Gates' "Psychology for Students of Education," The Macmillan Company, Publishers.)

22. Knowing the characteristics of first level reactions, how may the characteristics of second level reactions be stated?
23. *Ditto* third level reactions.
24. What are first level reactions usually called?
Ditto second level reactions?
Ditto third level reactions?
25. Give several illustrations of first level reactions, both motor and glandular.
26. *Ditto* second level reactions.
27. *Ditto* third level reactions.
28. A man has been working in a factory for six months before a circular saw turning hundreds of times per minute. His position is such that he can move his hand only in two directions, forward or backward. He cannot move to right or left, up nor down. One day when he is not expecting it, a red hot coal of fire is touched to his bare elbow. He has two choices: first, he can move his hand forward and have it cut off by the saw; second, he can hold it where it is and let it sizzle and fry under the coal of fire. Which would he do?
29. A short time ago I was driving out of a small town at about 35 miles an hour. As I went to pass a buggy driven by two old men, I gave a slight honk. They did not hear it and at a cross-street began turning in front of me. I swerved the car quickly missing a store on the left and the vehicle on the right, each by approximately one foot. After it was over I experienced a shiver and said to myself, "What a close call." What levels were concerned, and when?
30. What level is used when we normally put on the automobile brakes?
31. A man is sitting on the station platform in a backwoods town in Arkansas. His feet are hanging over the edge of the platform. There are three conditions as follows:
 1. A native comes by, sees a rattlesnake just below the man's feet, and says, "Hist." The man raises his feet, then looks down and sees the rattlesnake.
 2. The man sitting in the same position looks down and sees the rattlesnake. He lifts his feet.
 3. The man is sitting in the same position. A rattlesnake bites him on the toe. He jerks his foot up.

52 SYLLABUS IN PRINCIPLES OF EDUCATION

- What levels are concerned in each case?
32. Where do sensory neurones originate?
 33. What level do most neurones from the head enter?
 34. What part of the nervous system corresponds to the switchboard in the telephone analogy?
 35. What are the three kinds of neurones? What are their functions? Which group is the most numerous?
 36. What is the function of the cell body of a neurone?
 37. Are there any synapses in the foot?
 38. What is the longest part of a neurone?
 39. What is a "nerve"?
 40. In how many directions does the current travel? Trace definitely its path.
 41. What are the known characteristics of the nerve current?
 42. Do sensory neurones have dendrites? Do they receive from other neurones?
 43. Define synapse.
 44. Discuss: "Each neurone is an independent unit. They are arranged like trees with branches close together or intertwined."
 45. What is meant by the phrase "intimacy of synapses"? What is the function of education?
 46. Does education want to make all synapses more intimate?
 47. Discuss: "Practice makes perfect."
 48. Why do nervous impulses take particular courses?
 49. What is the time required for a simple reaction?
 50. What are the sensory, the motor, and the association areas of the brain?
 51. All learned reactions are on what level?
 52. Can ability to write words be destroyed by removal or injury of certain parts of the brain?
 53. Discuss: "From each and every receptor pathways may be made through the nervous system to each and every organ of response."
 54. What is meant by convergence of nerve impulses?
 55. Discuss: "From one receptor impulses may reach any given effector."
 56. What is meant by facilitation? Inhibition? Illustrate each.
 57. Are there any sensory neurones wholly within the spinal cord?

58. Does the simplest reflex arc include a synapse within the central nervous system?
59. Do all neurones have cell bodies?
60. Discuss: "The central nervous system provides innumerable possibilities for the distribution of nerve impulses."
61. Is every sense organ connected with the central nervous system?
62. Would an animal be totally incapable of movement if we removed the cerebral hemispheres?
63. Which of the following are reflexes?
 1. Jerking the hand from a hot stove.
 2. Throwing water on the fire.
 3. Picking up a pin.
 4. Running from a large beast.
 5. Sneezing.
 6. Spitting out a bitter substance.
 7. Laughing at a joke.
64. Define:
 1. Cell body.
 2. Axon.
 3. Synapse.
 4. Dendrite.
 5. Nerve.
 6. Central nervous system.
 7. Resistance.
 8. Reflex arc.
 9. Diffusion.
 10. Convergence.
 11. Facilitation.
 12. Inhibition.
 13. Reciprocal innervation.
65. Thorndike mentions the following as special functions of neurones:
 1. Sensitivity.
 2. Conductivity.
 3. Modifiability.
66. Thorndike says the general features of original arrangement of the nervous system are as follows:
 1. System of conduction units via switchboard.
 2. Switchboard of associative neurones complicated.

54 SYLLABUS IN PRINCIPLES OF EDUCATION

3. Provision for convergence of stimuli.

4. Provision for diffusion of stimuli.

Explain.

67. Discuss Thorndike's statement: "An original bond has its basis in original ease of conduction."

68. Are the words in group (1) below properly paired with group (2)?

Group (1):

Receptors.

Connectors

Effectors

Group (2):

Sensory neurones.

Central neurones (association,
interconnecting)

Motor neurones.

69. What is meant by Thorndike's "unicellular hypothesis"?

70. What is meant by original "satisfiers" and "annoyers"?

71. What are Thorndike's three fundamental laws of learning?
What are their sub-laws?

72. What are Thorndike's two laws of habit formation?

73. What are James' three laws of habit? Does James make use of the law of effect in these statements?

74. Discuss Thorndike's statement: "The most important thing in all the world is the satisfaction of human wants."

75. Discuss Thorndike's definition of satisfying: "When any behavior series is started and operates successfully its activities are satisfying, and the situations which they produce are satisfying."

"Successful means unimpeded, unthwarted, uninterfered with."

76. Are the following pairs of words properly arranged?

1. Gray matter—Cell bodies.

2. White matter—Axons.

77. Can a physician tell what part of the brain is impaired in case some group of muscles is paralyzed?

78. Is it true that the right half of the brain controls the left side of the body?

79. What did James mean when he said: "We learn to swim in winter and skate in summer"? Do you agree with him?

80. Distinguish between "central" and "peripheral" stimuli.

81. What is a reaction? A stimulus?

82. How much time is required for a reflex?

83. Discuss: "A stimulus releases energy like the trigger of a gun."

84. May a person's brain be self-active and literally create a thought?
85. Explain: "To call all mental processes reactions means it is always in order to call for the stimulus."
86. Identify:
 1. Fissure of Orlando.
 2. Fissure of Silvius.
 3. Giant pyramids.
 4. Apraxia.
 5. Somesthetic area.
 6. Aphasia.
 7. Nerve center.
 8. Spinal ganglia.
 9. Thalamus.
 10. Central fissure.
 11. Cortex.
87. Does the brain have any direct connection with any muscle?
88. Is there ever a direct connection between a sense organ and a muscle?
89. Is fatigue a response to a stimulus?
90. Are there any known forces to which sense organs are not adjusted?
91. On what level is the "homing of pigeons"?

BIBLIOGRAPHY

1. Gates, A. I., *Psychology for Students of Education*, Chaps. 2, 3, 4.
2. Woodworth, R. S., *Psychology of Mental Life*, Chaps. 2, 3.
3. Thorndike, E. L., *Educational Psychology*, Vol. I, Chap. 14.
4. Pillsbury, W. B., *Fundamentals of Psychology*, Chaps. 2, 3.
5. Watson, John B., *Psychology from the Standpoint of a Behaviorist*, Chap. 4.
6. Colvin, Stephen S., *The Learning Process*, Chaps. 1, 2, 3, 4.
7. James, William, *Principles of Psychology*, Vol. I, Chap. 4.
8. Chapman, J. C., and Counts, G. S., *Principles of Education*, Chaps. 5, 6.
9. Bagley, W. C., *Educative Process*, Chap. 1.
10. Fiske, John, *The Meaning of Infancy*, (Entire book).

UNIT III

NATIVE EQUIPMENT

1. Are men more alike in inherited or in acquired traits?
2. Are acquired traits inherited?
3. Do all instincts have value today?
4. Is the desire for social approval native?
5. What instincts are mentioned by Watson?
6. Evaluate Shakespeare's statement: "To thine own self be true. Thou cannot then be false to any man."
7. Evaluate the statement: Human nature is right.
8. What are Thorndike's "original satisfiers and annoyers"?
9. Should instincts be repressed?
10. What is sublimation?
11. Is universality a thorough test for an instinct?
12. Have the instincts and emotions of man changed much in the last 5000 years?
13. Can an Englishman learn the English language more easily than a Russian?
14. How would you deal with a child in which the native tendency of "mastery" was strong? Should he be crushed? Shamed? Humiliated? Discouraged?
15. Evaluate Thorndike's statement: "Some instincts should be inhibited, others modified, others re-directed."
16. How are instinctive tendencies dynamic forces for motivation?
17. Is the ability to play the piano instinctive?
18. Should rivalry be eliminated as a motive force in teaching? Evaluate the importance of "rivalry with self" in comparison with "rivalry with others."
19. Evaluate: "All education should start with native equipment as a basis."
20. What is a conditioned reflex?
21. Should a good teacher think of play as a rehearsal for the serious business of life?

22. Are "native" and "congenital" synonymous?
23. Do instincts need any stimulus to call them forth?
24. Does every instinct have a clear, definite, survival value?
25. Does the following illustrate the operation of an instinct?
"I do not like you, Dr. Fell,
The reason why I cannot tell,
But there is one thing I know quite well,
I do not like you, Dr. Fell."
26. Is "attention" a native form of behavior?
27. Evaluate Thorndike's statement: "Men's responses are not an unpredictable spasm when confronted by a new situation."
28. Are children instinctively afraid of a furry animal?
29. Is it instinctive to like coffee? Alcohol?
30. Does a child instinctively fear lightning? Thunder?
31. Does a girl instinctively love her mother?
32. What does Thorndike mean by the tendency of "multiform mental and physical activity"?
33. Do children learn to walk by instinct?
34. Evaluate: "All original tendencies are aimless in the sense that foresight of the consequences does not affect the response."
35. Evaluate: "Original nature and nurture inextricably cooperate from the birth of the individual."
36. Is the expert tea taster the product of nature or of inheritance?
37. Is "constructiveness" a specific instinct?
38. Why does a robin build one kind of a nest and a wren another kind?
39. Mr. Smith remarked of Mr. Jones, "He is a man who furnishes his own drive." What did he mean?
40. Does the sex life of a child begin at adolescence?
41. Does the "gang spirit" have a native basis? Does the high school fraternity have its basis in native tendencies?
42. What is the recapitulation theory? Culture epoch theory? Are they generally accepted today?
43. Is the ability to wear evening clothes with grace inherited?
44. Does the emphasis in modern education on "self-expression," "self-realization," have its basis in a due consideration for native equipment?
45. Is there an instinct of self-preservation?

58 SYLLABUS IN PRINCIPLES OF EDUCATION

46. What happens when an instinctive tendency is thwarted?
47. Should a junior high school be organized and operated with direct reference to furnishing stimuli for innate tendencies to operate?
48. How would you like to classify instinctive tendencies as?
Individual.
Social.
Sexual.
49. Is the fighting tendency stronger in men than in women?
50. Is the desire to have a radio instinctive?
51. Would you like to see a football game if you were the only spectator in the bleachers?
52. Can a fundamental instinct be eliminated as a tooth can be pulled?

BIBLIOGRAPHY

1. Chapman, J. C., and Counts, G. S., *Principles of Education*, Chap. 5.
2. Woodworth, R. S., *Psychology of Mental Life*, Chaps. 5, 6.
3. Gates, A. I., *Psychology for Students of Education*, Chaps. 6, 7.
4. Thorndike, E. L., *Educational Psychology*, Briefer Course, Chaps. 2-5.
5. Watson, John B., *An Introduction to Comparative Psychology*, Chaps. 4, 5.
6. James, William, *Principles of Psychology*, Vol. 2, Chap. 24.
7. McDougall, William, *Social Psychology*, Chaps. 3, 4.
8. Colvin, S. S., *The Learning Process*, Chaps. 3, 4.
9. Norsworthy, Naomi, and Whitley, M. T., *Psychology of Childhood*, Chaps. 1, 2.
10. Woodworth, R. S. *Dynamic Psychology*, (Entire book).

UNIT IV

AIMS OF EDUCATION

1. Evaluate the following aims of education:

1. PARKER, F. W.—The end of education is community life.
2. COMENIUS—Education is the development of the whole man.
3. PAYNE—Education aims at the realization of the typical man.
4. MONTAIGNE—Education is the art of forming men, not specialists.
5. WARD—Education means the universal distribution of extant knowledge.
6. RICHTER—It is the business of education to develop the ideal prize man.
7. THORNDIKE—The work of education is to make changes in human minds and bodies.
8. ADDISON—What sculpture is to the block of marble, education is to the human soul.
9. LOCKE—The attainment of a sound mind in a sound body is the end of education.
10. HERBART—The end of education is to produce a well-balanced and many-sided interest.
11. EMERSON—The end of education is to train away all impediment and to leave only pure power.
12. ARISTOTLE—The true aim of education is the attainment of happiness through perfect virtue.
13. LUTHER—The object of education is preparation for more effective service in church and state.
14. RABELAIS—The aim of education is the forming of a complete man skilled in art and industry.
15. ROSENKRANZ—Education is the process by which the individual man elevates himself to the species.

16. FROEBEL—The object of education is the realization of a faithful, pure, inviolate, and hence, holy life.
17. BAGLEY—Education may be tentatively defined as the process by means of which the individual acquires experience that will function in rendering more efficient his future action.
18. DEWEY—Education is the process of remaking experience, giving it a more socialized value through increased individual experience, by giving the individual better control over his own powers.
19. KANT—The purpose of education is to train children not with reference to their success in the present state of society, but to a better possible state in accordance with the ideal conception of humanity.
20. MILL—Education includes the culture which each generation purposely gives to those who are to be its successors in order to qualify for at least keeping up, and if possible, raising the improvement that has been attained.
21. KLAPPER—Education is to fit man for his ever changing and ever growing environment.
22. KILPATRICK—The aim of education is to bring the individual continually into increasing possession of himself and his power through continually increasing participation in the race achievement.
23. DUTTON—The aim of education is social consciousness which expresses itself in sympathetic, generous, helpful co-operation.
24. STRAYER—The aim of education must be broad enough to include both the welfare of the individual and the good of society.
25. MILLER—The function of education is to assist pupils in the attainment of right judgment, appreciation, and control of the values of life.
26. SPENCER—The function of education is to prepare for complete living.
27. HORNE—Ideal education must be physical, intellectual, emotional, moral, and religious.
28. CHARTERS—Education has as its function to assist pupils to appreciate and control the values of life.

29. HALL-QUEST—Education means adjustment and adjustment rests upon the ability of each individual to apply experience to new situations in the quickest, most effective, and most permanent fashion.
30. O'SHEA—Education must call into active being faculties natural to every mind. So far, we have glanced at conceptions of human nature given by sciences and we have found agreement in the evidence gained from these different sources all suggesting the perfecting of adjustment as the end of educational effort. From this point of view education must seek social action.
31. COLVIN—The great masses of children must be educated to their efficiency in order that the social ideal may be realized.
32. McDougall—Education can be built only on original equipment using inherited tendencies. It must teach the individual to react in many situations to which nature provides no response.
33. MONROE—The aim of education is to transmit to each succeeding generation the elements of culture and institutional life that have been found to be of value in the past with that additional increment of culture which the existing generation has succeeded in working out for itself, and to give each individual the fullest liberty in formulating his own purpose in life and shaping these to his activities.
34. BUTLER, N. M.—Education must mean a gradual adjustment to the spiritual possessions of the race.
35. RUEDIGER—The aim of education is to adjust man to those elements of his environment that are concerned in modern life and to develop, organize, and train his powers, that he may make efficient and proper use of them.
36. BOLTON—The aim of education is to develop individuals and to enable them to adjust themselves to their environment and to the ideals of perfection conceived by society and by the individual.
37. BETTS—The aim of education is to fit the individual to be a participant in a concrete, changing, social,

experience which is going on about him and of which his own life process forms an integral part.

38. ANGELL—Education has as its function the symmetrical development of the powers of the individual.
 39. ENGELHARDT—The schools of a democracy are organized to provide an opportunity for individual growth and development to the end that each may live a happy and productive life.
 40. CHAPMAN and COUNTS—The aim of education is to give each individual consistent with his capacity a maximum share in the enterprise of furthering health, of promoting family membership, of ordering and humanizing industry, of advancing the civic interest, of enriching the recreational life, and of fostering the religious aspirations.
 41. GRAVES—The function of education is to promote a constant re-organization of curriculum and methods of teaching in order to harmonize a due regard for the progressive variations of the individual with the welfare of the conservative institutions of society.
 42. COE, A.—The educated man must discriminate between the big and the little; the great and the trivial. He must, according to the newest conception of education, have a focalized training for a specific vocation.
2. Inglis suggests the following aims of education:
 1. Social-civic.
 2. Economic-vocational.
 3. Individualistic-avocational.
 Evaluate.
 3. Bulletin 35, 1918, Department of the Interior, entitled, "Cardinal Principles of Secondary Education," says, "Education in a democracy both within and without the school, should develop in each individual the knowledge, interests, ideals, habits, and powers whereby he will find his place and use that place to shape both himself and society toward ever nobler ends."
 4. Is this a good philosophy of education—"Each person should have education to the extent he is able to receive it"?

5. Distinguish between "equality" of opportunity and "identity" of opportunity.
6. Bulletin 35 mentioned above gives the following objectives of education. Discuss, and indicate how these principles should guide curriculum, organization, and method:
 1. Health.
 2. Command of fundamental processes.
 3. Citizenship.
 4. Worthy home membership.
 5. Vocation.
 6. Worthy use of leisure.
 7. Ethical character.
7. Professor Franklin Johnson reduces the "Seven Cardinal Principles" to the following "four" for secondary education. Do these "four" include the seven above?
 1. Health.
 2. Vocation.
 3. Social co-operation.
 4. Use of leisure.
8. Indicate the particular function of:
 1. Kindergarten.
 2. Elementary school.
 3. Junior high school.
 4. Senior high school.
 5. College or university.
 6. Professional school.

What principle or principles differentiate elementary, secondary, and tertiary education?

9. Discuss: "The most important functions of elementary education are conceived to be: first, to furnish the common training necessary for all youth regardless of sex, social status, or future vocation; and second, by means of this common training to integrate the future citizens of the democracy."
10. Discuss Briggs' statement: "The period in which differentiation begins and grows toward complete separation is that of secondary education."
11. Monroe gives the following steps in the development of secondary education. Explain:
 1. Secondary education determined by the nature of the process. This is indicated by training vs. instruction among the Greeks.

64 SYLLABUS IN PRINCIPLES OF EDUCATION

2. Based upon subject matter. Renaissance period.
 3. Based upon professional preparation. Among the Romans.
 4. Based upon class distinction. Renaissance and post-Renaissance.
 5. Based upon social selection.
 6. Based upon physiological and psychological age.
 7. Based upon interests and abilities.
 8. Based upon a combination of all the above. Preparation for social service and a training in efficiency. We are now in this period.
12. Inglis gives the following as special functions of secondary education. Explain and evaluate:
1. Adjustive or adaptive function.
 2. Integrating function.
 3. Differentiating function.
 4. Propaedeutic function.
 5. Selective function.
 6. Diagnostic or directive function.
13. Briggs gives the following as functions of secondary education. Evaluate:
1. "To teach pupils to do better the desirable things they are going to do anyhow."
 2. "To reveal higher forms of activity, to make these activities desirable and to an extent possible."
14. Explain Dewey's statement: "The purpose of education is growth."
15. Discuss: "Education is a preparation for life."
16. Discuss: "The school should be a typical embryonic community with democracy as its watchword."
17. Discuss: "The administrator should relate his policies definitely to some modern system of philosophic thought."
18. Kilpatrick believes one of the most important aims of education is the development of continuing interests in life.
- Do you agree with him?

BIBLIOGRAPHY

1. Douglass, A. A., *Secondary Education*, Chaps. 2, 12.
2. U. S. Bulletin No. 35, 1918, *Cardinal Principles of Secondary Education*, pp. 7-17.

3. Chapman, J. C., and Counts, G. S., *Principles of Education*, Chaps. 1, 4, 20.
4. Inglis, Alexander, *Principles of Secondary Education*, Chaps. 9, 10.
5. Dewey, John, *Interest and Effort in Education*, (Entire book).
6. Williams, L. A., and Rice, G. A., *Principles of Secondary Education*, Chap. 1.
7. Kilpatrick, William H., *Education for a Changing Civilization*, (Entire book).
8. Monroe, Paul, *Principles of Secondary Education*, Chap. 1.
9. Clement, J. A., *Principles and Practices of Secondary Education*, Chap. 16.
10. Johnson, Franklin W., *Administration and Supervision of the High School*, Chap. 2.
11. Kandel, I. L., *Twenty-five years of American Education*, Chap. 3. (Chap. 3 is contributed by W. H. Kilpatrick.)
12. Cox, P. W. L., *Curriculum Adjustment in the Secondary School*, Chap. 2.
13. Bobbitt, Franklin, *The Curriculum*, Chaps. 1, 2, 3.
14. Bobbitt, Franklin, *Objectives of Secondary Education*, *Sch. Review*, Dec. 1920.
15. Johnson, Franklin, *Objectives of Secondary Education*, *Sch. Review*, Vol. 28: 738-749.
16. Suzzallo, Henry, *Our Faith in Education*, (Entire book).
17. Bode, Boyd H., *Modern Educational Theories*, Chaps. 1, 10.
18. Kilpatrick, W. H., *Source-book in the Philosophy of Education*, Chaps. 2-5.
19. Dewey, John, *Democracy and Education*, Chaps. 1, 2, 7, 8, 9, 10.
20. Briggs, Thomas H., *Junior High School*, pp. 157-162.

UNIT V

CHALLENGE OF SECONDARY EDUCATION

1. The high school population has increased over 700 % since 1890. What are some of the problems presented?
2. Should a high school education be given at public expense to all who can take it?
3. Should universal education mean a high school education?
4. Is the high school granting diplomas too freely?
5. Should a high school diploma carry the right to enter college?
6. What is the function of the "New Academic Diploma" in New York State?
7. Is the high school to train for leadership? Followership? Both?
8. Is America attempting too great a task in secondary education?
9. Judd calls our secondary education program, "The Great Experiment." Explain.
10. Should "equality" of opportunity mean "identity" of opportunity?
11. If a community has no high school, should the district pay the pupil's tuition to a school outside the district? Should the district pay transportation?
12. Should American boys and girls think of a high school education as their right?
13. What percentage of pupils of high school age are in school? Should there be more?
14. Explain: "Public school officials, in going out to buy services were \$6,941,541 poorer in 1920 than in 1913."
15. Are we spending too much money for education?
16. Is education a state or national function? How did it come to be?
17. Evaluate: "John and Mary met one day on a college campus. Mary said to John, 'John, I should like to

ask you a question. Why do you not go out socially? I never see you at any of the college functions. John, you and I have known each other all our lives. We were in high school together, and you remember we had a great time in those days doing things.' John said, 'Mary you are right, we have always been friends. So, I am going to tell you the truth. The fact is, Mary, I do not go out because I am too poor to dress well.' Mary said to John, 'John, too poor to dress well? John, do you know I am too poor not to dress well.' According to the story, years afterward Mary was occupying a very fine position and was still too poor not to dress well. John was occupying a very mediocre position and was still too poor to dress well. To the poor boy who says, 'I cannot afford to go to high school,' we should say, 'You cannot afford not to go.'"

18. What does it mean to conceive of education as an investment?
19. How can we show children that if they go to high school they are not "paying too much for their whistle"?
20. Evaluate: In a strict, economic sense the whole matter is a cold-blooded proposition. The state does not send Mary Jones to school because it wants Mary Jones to be happier, as a personal matter. It sends Mary Jones to school because Mary will be thereby a better contributor to society. "Contribution" is here conceived to include all of Mary's activities, desirable and undesirable. More education means on the average less crime, less poverty, less dependence, more productiveness. More "good" things of life for Mary Jones mean a true economic asset to the state. Education becomes, then, for the state, a clear-cut investment.
21. Evaluate: A successful business man looks out of his office window into the rear yard of a poverty-stricken home. He sees there poverty, ignorance, and squalor. He says to himself, "Yes, I am glad to pay taxes for the education of these poor children. I am glad to contribute to them as I give to charity at Christmas time." There are some who will say that this man is a full-sized citizen, but the author is not one of them. It is the author's opinion that this man has misconceived the primary

function of education. He conceives education not as an "investment" but as charity. When education is so conceived, money paid for the support of education becomes the beggar's mite "tossed in scorn" to pay for the education of those unable to educate themselves. Such a point of view means to degrade the whole business of education. This successful business man owes a duty toward the education of these children because their education will make this community a better place in which to live. His taxes become, then, an "investment" in the "good" things of life.

22. Evaluate: Education is an "investment" to the individual in no less degree than to the state. The interest upon the investment accrues correlatively and at the same time to the individual and to society. The individual's progress enables him to make a greater contribution to the state. Conversely, the state is thus enabled to make a better contribution to him.
23. Evaluate: A colleague of mine recently remarked, "There came an entire change in my scheme of life several years ago when I came to this point of view . . . the way to have more money is not to spend less but to make more."
24. Evaluate: Economically, education is an "investment" which is fundamentally sound, but more than this it is an investment in the greater "goods" of life, . . . the social, the spiritual, and the esthetic . . . values which are eternal, which cannot be bought with gold.
25. Does the following statement offer too great a challenge: "Consequently, education in a democracy, both within and without the school, should develop in each individual the knowledge, interests, ideals, habits, and powers whereby he will find his place and use that place to shape both himself and society toward ever nobler ends"?
26. Explain this statement: People in America have a "blind faith" in education.
27. Can education promote progress?
28. Should patrons and pupils understand in general the purposes and problems of the local high school?
29. Evaluate: Extending secondary education will cause a dearth of common laborers.

30. What dangers are there in "coddling mediocrity" in the high school?
31. Should a high school principal "sell" his school to the community? If so, how?
32. Should a teacher "sell" his course to his pupils?
33. Evaluate the statement of Cox: "If pupils dislike or are bored by a subject, if large numbers fail, then the content and method must be examined critically; for no matter how much justification it may have in 'scientific' technique, it is useless if it does not educate, does not arouse the interests of pupils."
34. Evaluate: The selling of the materials of the curriculum is legitimate in the sense that the teacher shows the contribution of these materials to life's problems and purposes.
35. Explain: Two teachers may be teaching the same course or syllabus and yet their methods of "selling" so different that the subject materials will hardly be recognized as identical.
36. Evaluate: It is the teacher's right and duty to "sell" the curriculum to the pupils through her methods of instruction. As a freshman in the university, the author well remembers a certain teacher of history. He was a tall, gaunt, hollow-eyed, serious-looking man. At the beginning the author expected a wretchedly uninteresting course. But this man by his plus knowledge, his unusual illustration, his intimate and close-up pictures from the lives of great characters, made history live in the lives of those college freshmen. Mary Queen of Scots, Elizabeth, Henry the Eighth, were characters of flesh and blood so that one felt they would bleed if he should prick them with a pin. In the class were some serious-minded students—future Phi Beta Kappas; there were average students; there were others who were just going to college. All loved this course. He "sold" this course to them and the author believes legitimately. Outside of his own interesting personality, he did it through his psychological selection and presentation of materials. His choice of illustration was a great "selling" agency. His illustration illustrated. Though selected often from commonplace things or events, it seemed to contain a poignant

slant. It was distinctive in its novelty. Artfulness and subtlty were frequently employed but without fixing attention on themselves as ends. The students "raved" about the course's being so interesting and profitable. Few courses are interesting or uninteresting in themselves. The guidance of the teacher makes them one or the other. The author believes the teacher has the legitimate right to "sell" his courses through making them interesting. This interest must come, as Dewey points out, from the materials themselves and not from artificial, sugar-coated sources.

37. Evaluate: "A teacher happened to be rooming at the same place where one of her pupils lived. She noticed that he was reading with a vengeance 'Diamond Dick,' 'Nick Carter,' 'Hack Harkaway,' and others of the same type. Some teachers would have advised the parents to prohibit his reading such trash. But this teacher believed it was probably better for him to read any and all literature than to read nothing. She had an idea. She came home one evening and told him she would like to read with him. So they read two or three of the 'blood-and-thunder' type together. He read part time and she read part time. The next night they read two or three more. The third night she brought home one of Stevenson's books. She said, 'Do you know I have a book tonight I believe we shall like. I should like for us to read it together.'

They did so and the boy was thrilled with it and liked it. After it was finished, the boy said to the teacher, 'Does Stevenson have another book like that?' The teacher told him that he did, and then they read others together. This boy probably sometime might read Browning, but he could not plunge from 'Nick Carter' to Browning. This teacher knew how to 'sell' her materials."

38. Evaluate: The teacher must "sell" her course the first day and the first week and the first month; she must also "sell" it the second day and the second week and the second month, and then keep on selling it throughout the year.
39. Should the secondary school assume responsibility for the moral and emotional training of youth?

40. What is meant by the "equalization of educational opportunity"? Outline the purpose and provisions of the Federal Education Bill.
41. Should modern principles of business organization be applied to secondary school administration?
42. Should the secondary school assume an important responsibility for the health of pupils?
43. Should the secondary school educate a pupil to make profitable use of leisure time?
44. What is the ultimate test of whether the public will support secondary education?
45. What is "continuation" education? "Adult" education? Does the secondary school have a responsibility here?
46. What is the duty of the secondary school in the field of guidance? What conditions have made guidance very important?
47. How should pupils of non-academic type be provided for?
48. What place should be given to extra-curricular activities in the modern high school?
49. Should the high school building be a "social center"?
50. Is the main function of secondary education to prepare for college?
51. Do you agree with the statement of E. J. Ashbaugh: "We should somehow find a way to determine whether the value of the money expended for a paved road in a given community is worth more or less than the same amount of money expended on a specific part of the educational program in the same or another given community"?

BIBLIOGRAPHY

1. Douglass, A. A., Secondary Education, Chap. 2.
2. Uhl, W. L., Principles of Secondary Education, Chaps. 1, 3.
3. Judd, Chas. H., The American Experiment of Free Higher Education, Sch. Review, Vol. 29: 94-105.
4. Johnston, Chas. H. and Others, Junior-Senior High School Administration, pp. 34-64.
5. Colvin, S. S., Introduction to High School Teaching, Chap. 1.
6. Smith, F. M., What's Wrong with the American High School, Sch. and Society, April 16, 1927.

72 SYLLABUS IN PRINCIPLES OF EDUCATION

7. Hanus, Paul H., *Opportunity and Accomplishment in Secondary Education*, Sch. Review, April 1926.
8. Pittinger, B. F., *Some Relations of Education and Democracy*, Ed. Admn. and Supervision, Oct. 1922.
9. Dewey, John, *Democracy and Education*, Chaps. 2, 6.
10. Cubberley, E. P., *Changing Conceptions of Education*, (Entire book).
11. Kilpatrick, W. H., *Education for a Changing Civilization*, (Entire book).
12. Snedden, David, *What's Wrong with the Schools*, Ed. Admn. and Supervision, May 1922.
13. Strayer, G. D., *Financing Public Education*, Teachers College Record, Oct. 1924.
14. Snedden, David, *The High School of Tomorrow*, School Review, Vol. 25, pp. 1-15.
15. Briggs, Thomas H., *Curriculum Problems*, (Entire book).
16. *Cardinal Principles of Secondary Education*, U. S. Bulletin No. 35, 1918, (Entire bulletin).
17. Bolton, F. E., *Some Paramount Objectives of Secondary Education*, Education, Jan. 1926.
18. Davis, C. O., *The North Central Association Quinquennial Study*, School Review, Sept. 1925.
19. Thayer, V. T., *Present Tendencies in Secondary Education*, Ed. Admn. and Supervision, Oct. 1925.
20. Chapman, J. C., and Counts, G. S., *Principles of Education*, Chap. 20.

UNIT VI

DEVELOPMENT OF AMERICAN POLICIES IN EDUCATION

1. What have been the three types of schools in the historical development of American secondary education?

Indicate for each type:

1. The date of establishment.
 2. Character of curriculum.
 3. Purpose.
 4. Method of control.
 5. Method of support.
2. Did girls attend the Latin Grammar schools of Early New England?
 3. Were the Latin Grammar schools and the academies democratic in the sense that we use the word now?
 4. What was the attitude toward secondary education in:
 1. The New England colonies?
 2. The Central colonies?
 3. Southern colonies?
 5. What was the dominant aim of the first Latin Grammar School?
 6. How did Boston happen to establish a Latin Grammar school?
 7. Discuss the following characteristics of the high school system launched by the English High School of Boston, 1821:
 1. Aim—universal education.
 2. Both sexes.
 3. Public support and control.
 4. Broader curriculum than the Latin Grammar school or the academy.
 5. Free.
 6. Popularized education.
 7. Non-sectarian.

74 SYLLABUS IN PRINCIPLES OF EDUCATION

8. State system.
9. Standardized education.
10. Free and universal.
8. What was the Massachusetts Law of 1647? Indicate its position on the following points:
 1. Extent of education.
 2. Obligation of whom?
 3. Power of state in regard to obligation.
 4. How was the kind and minimum amount to be determined?
 5. Support.
 6. Secondary education as a state function.
9. What was the Kalamazoo Case? Date? Significance?
10. Explain the evolution of "township" and "community" high schools.
11. Is secondary education in America tending toward co-education?
12. How did education in America come to be a state function?
13. Will the proposed federal bill usurp the authority of the state?
14. The following is Uhl's summary of the American policy on secondary education. Evaluate:
 1. Universal secondary education.
 2. Obligation primarily on parent.
 3. State has the right to enforce.
 4. State may fix a standard which shall determine the kind of education and the minimum amount.
 5. Public money raised by general tax may be used to provide such education as the state requires. The tax may be general though attendance is not.
 6. Education higher than the rudiments may be supplied by the state. Opportunity must be provided at public expense for youths who wish to be fitted for the university.
 7. Secondary education needs to be reorganized from time to time.
 8. Secondary education for girls and boys.
 9. True wealth is the cultivated talent of citizens.
 10. Legislation is an aid.
 11. Public education is better than private.
 12. Public support and control.

13. Popularization through national appeal.
14. Public judgment for protection.
15. Modern high school to be adequate has to be evaluated on the following points:
 - A. Buildings.
 - B. Library and laboratories.
 - C. Records.
 - D. Requirement for graduation.
 - E. Instruction and morale.
 - F. Salaries.
 - G. Preparation of teachers.
 - H. Teaching load.
 - I. Pupil load.
 - J. Program of studies.
15. In what century did the American public high school really establish itself?
16. What was the Massachusetts Law of 1789?
17. Name some of the early academies.
18. In what section of the country were academies most numerous?
19. Was the academy primarily a public or a private institution?
20. What is meant by state aid? Federal aid?
21. In what ways did the academy movement affect secondary education in America?
22. Did the "8-4" organization in America grow up as a result of well-tested scientific principles?
23. What "grades" does secondary education include at the present time?
24. When did the Committee of Ten make its report? What were the main points in this report influencing secondary education?
25. State the chief principles of Bulletin No. 35, 1918, Department of the Interior, "Cardinal Principles of Secondary Education."
26. State the basic principles underlying the junior high school organization.
27. Did the Latin Grammar school become popular outside of New England?
28. What is the primary function of the high school at the present time?

76 SYLLABUS IN PRINCIPLES OF EDUCATION

29. Where and when was the first public high school in the United States, outside of the New England States, established?
30. Explain this statement: "The early American High School was conceived by many as a pauper school."
31. At approximately what time did the "manual training movement" enter the American high school? What was the function of manual training at first conceived to be?
32. When did the great influx of pupils into the American high school begin?
33. Compare the high school enrollment in 1890 with that at the present time.
34. Does the American constitution mention education?
35. Why have we tended toward gradual development of control by larger governmental units?
36. What have been the chief sources of new ideas in American education?
37. What have been the chief educational achievements of the last fifty years?

BIBLIOGRAPHY

1. Douglass, A. A., Secondary Education, Chap. 1.
2. Monroe, Paul, Principles of Secondary Education, Chap. 4.
3. Inglis, Alexander, Principles of Secondary Education, Chap. 5.
4. Uhl, W. L., Principles of Secondary Education, Chap. 2.
5. Kandel, I. L., Twenty-five Years of American Education, Chap. 10.
6. Williams, L. A., and Rice, G. A., Principles of Secondary Education, pp. 107-138.
7. Cubberley, E. P., Public Education in the United States, Chap. 2.
8. Dewey, John, Democracy and Education, Chap. 7.
9. Pittinger, B. F., Use of the term "Secondary" in American Education, Sch. Review, Vol. 24: 130-141.
10. Graves, Frank P., A Student's History of Education, Chap. 27.

UNIT VII

SECONDARY EDUCATION IN OTHER COUNTRIES

1. At what age does secondary education begin in Germany? France? Has their practice influenced our organization in America?
2. Explain the statement: America, unlike European countries, has a straight line system of schools from the kindergarten through the university.
3. Explain: Germany and France have parallel systems.
4. Explain: Gradualness and continuity are characteristics of German and French education.
5. Have elementary and secondary education been closely delimited in Germany?
6. Explain: "In Germany, under the traditional system, the school route a pupil pursued depended upon social and economic cleavage."
7. Has the curriculum of the conventional German secondary school been flexible or fixed?
8. What has been Germany's attitude toward secondary education for girls?
9. Which have had the more extensive training in the past, German secondary teachers or American high school teachers?
10. Discuss the German point of view relative to education as a state function. Is secondary education in America a state function?
11. What value is there in knowledge of the systems of secondary education in other countries?
12. Compare the academy in America with the conventional secondary school of England at the present time.
13. Do social distinctions influence secondary education to a great degree in England?
14. What are the "Great Public Schools" of England?

78 SYLLABUS IN PRINCIPLES OF EDUCATION

15. Have European countries favored co-education in the secondary school?
16. Does the "comprehensive" American junior high school accord with European conceptions and practices?
17. Identify: Lycee, gymnasium, volkschule, realschule.
18. Have German schools been free in the sense that American schools are free?
19. From what European school was the Boston Latin Grammar school an off-shoot?
20. What are the "leaving examinations" of Germany?
21. Explain Bolton's statement relative to the traditional German Gymnasium: "All roads lead to Rome; but one road leads to the university."
22. Has Germany emphasized the decorative and ornate in school buildings?
23. How has secondary education in Germany been tied up with the military system?
24. Does Germany have a comparatively large number of men teachers in the secondary school?
25. Compare the tenure of German secondary teachers with those in America. Why the difference?
26. Kandel has recently said: "The following are the present problems in European secondary education:
 1. Elimination of over-lapping between elementary and secondary education.
 2. The retention of secondary education for the elite, the advantage, however, still remaining with the wealthy classes.
 3. Gradual increase in the number of modern subjects.
 4. The complete separation between general and vocational education."

What is our position in America on these problems?

27. Discuss Kandel's statement relative to recent European tendencies in education: "It has been the chief purpose of this brief review to emphasize two points. First, education has undoubtedly become one of the primary concerns of government, not of bureaucracies as in the nineteenth century, but of the constituted representatives of the people voicing the interests of the people. Second, the world of education is today an assemblage of great laboratories and experimental stations, in which problems

of approximately the same character are being considered in the light of one purpose, how best to equip the individual not merely as a member of society but as a member of democratic society."

BIBLIOGRAPHY

1. Inglis, Alexander, *Principles of Secondary Education*, Chap. 6.
2. Douglass, A. A., *Secondary Education*, Chap. 5.
3. Uhl, W. L., *Principles of Secondary Education*, Chap. 11.
4. Monroe, Paul, *Principles of Secondary Education*, Chap. 3.
5. Williams, L. A., and Rice, G. A., *Principles of Secondary Education*, pp. 32-107.
6. Graves, Frank P., *A Student's History of Education*, Chap. 25.
7. Kandel, I. L., *Junior High School in European Systems*, *Ed. Review*, Vol. 58: 303-327.
8. Kandel, I. L., *Twenty-five Years of American Education*, Chap. 16. (Contributed by J. J. Osuna and Gildo Masso.)
9. Kandel, I. L., *Standards of Achievements in European and American Secondary Schools*, *Sch. and Society*, August 20, 1927.

UNIT VIII

THE SECONDARY SCHOOL PUPIL

1. What is approximately the average I. Q. of high school freshmen? Seniors?
2. Is the average I. Q. of high school seniors who go to college higher than the I. Q. of those who do not?
3. Rugg says, "By and large in this country we fail 20 % of our student population." List in their order of importance several causes of failure.
4. Do high school pupils like some subjects better than others? If so, should their likes and dislikes be given any consideration in curriculum making?
5. Explain this statement: "The rate of mental growth of pupils from nine to fifteen years of age is very nearly a straight line affair, and is approximately the same for each year for the school population of these ages."
6. Evaluate this statement: "Differences between the sexes in innate mental ability are negligible from the standpoint of high school organization."
7. List several ways whereby a modern junior high school meets individual differences of pupils.
8. Explain this statement: "General intelligence does not in general improve after 14 years of age."
9. Compare the number of failures which should occur in a fourth-year high school subject vs. a first-year high school subject.
10. Evaluate this statement: "Ideally, in a properly organized school no pupil should fail."
11. Evaluate this statement: "Achievement is the single most important factor which should enter into a pupil's mark."
12. Should the normal curve be used in all classes in assigning marks?
13. What should be the functions of a pupil's report card? How may these functions best be realized?

14. What is meant by homogeneous grouping of pupils? List arguments for and against. How should the curriculum be adapted?
15. In general do pupils who succeed in mathematics succeed also in Latin? English? Music? Drawing?
16. Is there such a thing as a general academic ability?
17. Compare the average general intelligence of pupils who elect Latin with those who elect shop work.
18. Should we expect that on the average the I. Q. of the vocational student will be as high as that of the academic student?
19. What is the function of educational tests and measurements?
20. What is meant by diagnosis of a pupil's abilities? Prognosis?
21. Should a school system have systematic periodical physical examination of pupils?
22. Should physical growth and capacity be given major consideration in the classification and promotion of pupils?
23. Is there a significant correlation between mental and physical efficiency?
24. What consideration should be given to "social age" in the promotion of pupils in:
 1. Elementary school
 2. Junior high school
 3. Senior high school
25. Explain this statement: "The norm for pubescence is a distribution range, not an average chronological age."
26. Make a list of ten men who have made significant contributions relative to the mental equipment of high school pupils.
27. Is it possible to make many generalizations regarding the physical traits of secondary school pupils?
28. Do secondary school pupils vary much in physical and physiological maturation?
29. Is this statement true: "The brightest pupils in the freshman class in any high school are usually the younger pupils"?
30. Should "physiological age" be the major factor in planning physical education programs in the high school?

82 SYLLABUS IN PRINCIPLES OF EDUCATION

31. How can the average high school make use of the known facts regarding the mental equipment of its pupils?
32. Make a table showing the results of experiments to date in the field of physical traits.
33. Compare the range of abilities, interests, racial and economic backgrounds of our secondary school pupils today as compared with those of a generation ago.
34. Do you agree with Cox's statement: "Some pupils are not interested in scholarship. The junior high school should have an interest in these pupils also"?
35. Approximately what is the average compulsory age limit for school attendance at the present time? Does the junior high school have a function here?
36. Is the present secondary school "selective" along social and economic lines?
37. Compare the growth of secondary school enrollment with elementary school enrollment and with the general population in the last quarter century.
38. Of those boys who leave school to go to work, do most of them leave because they are obliged to by economic necessity, or because they want to leave?
39. List in their order of importance the chief causes of elimination of pupils from high school.
40. In 1911 the teachers of the Washington Irving Junior High School, New York City, said, "A public high school differs from an elementary school chiefly in the age of its children." Do you agree?
41. Explain this fact: "The expectancy of completing a high school course diminishes as the entering age of the pupil increases."
42. Show how the "gradual" theory of adolescence influences:
 1. Curriculum
 2. Organization
 3. Method
43. Do boys and girls differ with respect to disciplinary or social control?
44. Do you favor co-education for high school boys and girls?
45. Evaluate Cox's statement: "Desirable differences should be encouraged; mere eccentricities should be leveled."
46. Do pupils like best as a rule those subjects which they find easiest?

47. List in what seems to you their order of importance the reasons for pupils' disliking subjects.
48. Would you expect a greater number of boys than girls to fail English?

BIBLIOGRAPHY

1. Uhl, W. L., *Principles of Secondary Education*, pp. 214-420.
2. Johnson, Franklin W., *Administration and Supervision of the High School*, Chap. 7.
3. Inglis, Alexander, *Principles of Secondary Education*, Chap. 4.
4. Monroe, Paul, *Principles of Secondary Education*, pp. 685-708.
5. Thorndike, E. L., *Changes in the Quality of Pupils Entering the High School*, *Sch. Review*, May 1922.
6. Colvin, S. S., *Introduction to High School Teaching*, Chap. 2.
7. Cox, P. W. L., *Curriculum Adjustment in the Secondary School*, Chap. 4.
8. Clement, J. A., *Principles and Practices of Secondary Education*, Chap. 13.
9. Brown, J. C., and Minnick, J. H., *Preferences of Secondary School Pupils*, *Ed. Admn. and Supervision*, Nov. 1915.
10. Gates, A. I., *Nature and Educational Significance of Physical Status, etc.*, *Journal of Educational Psychology*, Sept. 1924.
11. Counts, G. S., *The Selective Character of American Secondary Education*, (Entire book).
12. Feingold, G. A., *Mental Analysis of High School Failures*, *Ed. Admn. and Supervision*, Jan. 1923.
13. Hughes, W. H., *Provisions for Individual Differences in High School Organization and Administration*, Jr. of *Ed. Research*, Jan. 1922.
14. Dynes, J. J., *The Relation of Retardation to the Elimination of Pupils from the High School*, *Sch. Review*, Vol. 22: 396-406.
15. Barton, W. A., *Pupil Reactions to School Reports*, *Sch. Review*, Dec. 1925.
16. Adams, Jesse, E., *Reactions of High School Pupils to High School Subjects*, *Sch. Review*, May and June 1927.

UNIT IX

ADOLESCENCE

1. Evaluate G. Stanley Hall's statement: "Adolescence is a new birth, for the higher and more completely human traits are now born."
2. What is meant by the "gradual" theory of development? "Periodic" theory of development? To which do you ascribe?
3. Is a child capable of reasoning prior to the period of adolescence?
4. What is meant by the "recapitulation theory"? "Culture epoch theory"? Are they in good repute?
5. What is meant by the "gang age"?
6. Evaluate the statement: "Adolescents need particularly education in social control."
7. Does "hero worship" seem to be strong in adolescents?
8. Does adolescence occur uniformly in both sexes?
9. Do such factors as race, environment, climate, occupation, and health influence the growth and development of adolescence?
10. Would you recommend the books of Robert Louis Stevenson to adolescents?
11. Evaluate Rousseau's statement relative to adolescence: "We are born twice, once to exist and again to live."
12. Is "preaching" to adolescents of any particular value?
13. Is this statement true: "The adolescent has a sex consciousness but not a reciprocal sex attraction"?
14. Is this statement true: "The adolescent boy is unmoral rather than immoral"?
15. Is it true that adolescence is particularly a period of "day dreaming"?
16. Certain traits of character and personality seem somewhat pronounced at the period of adolescence. List these characteristics under the following heads:

1. Physical.
2. Intellectual.
3. Emotional.
4. Volitional.

How should the school deal with these characteristics?

17. What are some of the mental disturbances peculiar to adolescence?
18. How would you deal with a stammering adolescent?
19. Evaluate this statement: "Since the World War there has been a decline in moral standards. Hence, adolescents should be segregated on the basis of sex in junior high school classes."
20. Should sex instruction be given by the various teachers in junior high school classrooms?
21. Is it correct to say, "The sex life of the child begins at adolescence?"
22. Should "tale-bearing" be encouraged among junior high school pupils?
23. Do junior high school pupils have an instinctive tendency to band together?
24. Should the school desire to create in adolescents a spirit of docility?
25. List ten men who have made contributions on the problem of adolescence, with their contributions.
26. What educational significance do you see in Wordsworth's lines:

"There was a time when meadow, grove, and stream,
 The earth and every common sight,
 to me did seem
 Appareled in celestial light,
 The glory and the freshness of a dream.
 It is not now as it hath been of yore,
 Turn wheresoe'er I may,
 By night or day,
 The things which I have seen I now can see no more"?

BIBLIOGRAPHY

1. Douglass, A. A., Secondary Education, Chap. 7.
2. Pechstein, L. A., and McGregor, A. L., Psychology of the Junior High School Pupil, Chaps. 1, 2, 3.
3. Davis, C. O., Junior High School Education, Chap. 3.

86 SYLLABUS IN PRINCIPLES OF EDUCATION

4. Monroe, Paul, Principles of Secondary Education, Chap. 7.
5. Inglis, Alexander, Principles of Secondary Education, Chaps. 1, 2.
6. Hall, G. Stanley, Adolescence, Vol. I: Preface; Chaps. 3, 5.
7. Terman, L. M., The Hygiene of the School Child, Chap. 6.
8. Thorndike, E. L., Educational Psychology, Vol. I, Chap. 16.

UNIT X

DISCIPLINE OR SOCIAL CONTROL

1. Evaluate the statement: A teacher in the classroom "should not see too much."
2. Should a pupil be penalized in his marks because of his deportment?
3. Do slogans and placards, such as, "We believe in courtesy," "We do right because it is right," etc., have a place in school buildings? Should they be in corridors? Classrooms? Both?
4. Does an "All Fools' Day" ever occur in a good school?
5. Miss Morehouse mentions the following types of discipline. Explain and evaluate each:
 1. Appeal to absolute authority.
 2. Appeal to personal interest of pupil.
 3. Appeal to personal influence of teacher.
 4. Appeal to wholesome repletion.
 5. Appeal to social consciousness.
6. Evaluate suspension and expulsion as methods of punishment.
7. What is school "morale" or "esprit"? Do you believe in it or do you consider it a jingoistic expression? What is the function of the school assembly here?
8. If a rule is made, should an exception ever be permitted?
9. Evaluate: After winning the most important foot-ball game at the close of the season, the pupils of a certain small town high school wanted to build a bonfire. The principal would not permit it.
10. Miss Morehouse analyzes offenses in discipline as follows. Explain and illustrate each:
 1. Offenses due to misdirected energy.
 2. Offenses due to resentment at control.
 3. Offenses due to peculiar physical condition of pupils.
 4. Offenses due to lack of training at home and false ideals.

5. Offenses due to desire to attract attention.
6. Offenses due to imitation of others.
7. Offenses due to lack of culture.
11. Discuss: The teacher who is continually sending pupils from her classroom to the principal is weak.
12. Should pupils talk during exchange of classes, in a well-organized school?
13. Do you favor a "two-minute period" or a "five-minute period" for the exchange of classes in high school?
14. Discuss the following statement: Discipline or social control can be conceived in terms of the prevention, or the disintegration and dissolution of barriers.
15. Discuss: The more important considerations in teaching and social control are not covered by legal enactment. They are dependent on the human touch.
16. Evaluate: When a high school teacher observes a pupil chewing gum in the early days of school, a rather typical procedure is as follows: The teacher says, "Mary, will you please come to the waste basket and put that filthy gum in it as quickly as you can. Don't you know you should not chew gum?" Mary walks out from her seat; the class giggles. She comes to the waste basket amidst the serious tension of the class. In the face of the group she inserts her hand (horrible dictu) into the first section of the esophagial cavity and locates the pernicious object of offense. It drops to the bottom of the basket with a thud. The class smiles half-cynically at what they know is the temporary and not the ultimate finale of a melodramatic episode.
17. A short time ago the magazine *OUTLOOK* asked for personal letters on the subject, "What the church means to me?" The following letter written by a girl of 16 won second prize. Read the following letter and ask yourself these questions:
 1. Is this letter typical of the modern girl? If so, in what way? If not, in what way is it not typical?
 2. What is the real problem which is suggested for teachers?

"I am a high school girl, just sixteen, and my candid opinion is: the church is queer. The queerest thing about it is,

it is trying so hard to amuse us. It is like my grandmother trying to play basket-ball. We young people don't want the church to find amusement for us; we can find plenty of that for ourselves. When I was a very small child, I thought our church was the place to learn to be good—they taught me that in Sunday school. Now, all we do is to belong to a big class, work to make it the biggest and its contributions the biggest; go to conventions, where we eat, sight-see, go to committee meetings and vote. Of course our bunch has a wonderful time; but we could have that anywhere.

I never stay to the preaching on Sunday, because it is so long before Dr. Angell begins to preach. He tires himself all out reading the notices and telling us about the causes we must give money for. When he begins to preach, at quarter to twelve, his voice is squeaky and he has to yell to be heard. I drive the car out to the park and read a novel until church is over, then go back for mother and dad. Sometimes a bunch of us do that, and have a kick out of it; but, honestly, I don't enjoy it.

There is nothing that can take the place of church in my life, and really fill the place. There are sixteen-year-old troubles that I imagine the church could help, such as the trouble of choosing my friends, especially boy friends; deciding what I want to be, and where it is best to go; [to know where to stop when a gay time is on; to know how far I'm justified in putting one over on our dear old dotty English teacher; most of all, to have a reliable rule for making decisions.

The world is perfectly superb. I want to stay in it forever, get all the fun that's going, and be a pioneer of something fine. But there is so much to choose from that it makes me dizzy. I wish the church would teach me about once or twice a week, in words that I could understand yet words that are beautiful and fine-voiced, how to get the best out of life without being reckless. Mother makes me go to Sunday school but that does not meet my need. I want to want the best; sometimes I don't want it and find that fun. Why go to a church supper when a dance is so much prettier? Why waste my time studying the Sunday school lesson—a little piece of the

Bible, then stars for left-outs? That's not how I study history or science.

The Church is like 'The Blue Boy' hanging in my room—ornamental but not useful. A roomful of paintings without mother and dad would be nothing. I think it is God that I need. I learned that when I got up at 4 A.M. and watched the sun rise and heard a meadow-lark talk. I wish the Church would come down out of the picture, help me live right, so I could say to 'Bill'—my best friend, 'You can't afford to miss going with me to church.'"

18. Evaluate: The teacher has in her nervous system an emotional thermometer. She comes into the classroom in the morning happy and bright. The mercury is standing normally. Some little annoyance occurs and the emotional mercury rises slightly. The incident is trivial, unimportant in itself. Later another annoyance occurs, and then another, with the mercury correspondingly rising, until the boiling point is reached. Then there is a Vesuvian reaction. Barriers are then built up which time may never disintegrate and dissolve. These Vesuvian eruptions become the nuclei of vicious psychological complexes which destroy the morale of the whole school.
19. Evaluate: White, in his book, "School Management," saw the teacher's work analogous to that of the ichneumon, relative to the problem of social control. The crocodile along the banks of the Nile lays millions of eggs. If all these eggs were allowed to hatch, the army of crocodiles would overwhelm all Egypt. But the ichneumon destroys millions of these eggs in embryo before they are permitted to hatch.
20. Evaluate: Beneath the burning rays of a Southern sun, the author, then a military officer, found one day a "rookie" lying in a mud puddle, with his shaving paraphernalia lying near-by. The author asked him why he was there. The story briefly was this: This man had not been shaven for inspection. The beetle-headed first sergeant who had spent six years with the "regulars" and who liked to believe that he was hard-boiled, had given the "rookie" this punishment. The first sergeant did not know that [under military regulations he was subject to court martial for such unreasonable and humiliating punishment.

Some teachers are as unreasonable in their handling of problems of social control as this sergeant. They build up barriers as high as the Himalayas.

21. Evaluate: Barriers may be prevented, disintegrated, and dissolved by assuming toward problems of social control an objective, impersonal, detached attitude. Most beginning teachers can hardly avoid thinking of refractions as personal offenses against themselves. Professor Bagley tells of an educator who was speaking one afternoon on the subject of discipline. At the conclusion of the lecture he put on his overcoat and fur muffler (the first seen in that section) and started for his hotel. As he was turning a corner, a little "imp" across the street yelled out, "My, ain't that feller got long ears." Supposing that the remark was suggested by his fur muffler and aimed at himself, he started across the street to punish the fellow for his impudence, but, on glancing up the street, he saw a man leading a mule with the longest ears he had ever seen. He came quickly to the conclusion that the boy meant the mule. Henceforth, in his lectures he said, "It is usually wise to take it for granted that the mischief of the school is aimed at the mule."
22. Evaluate: To say that a teacher's attitude toward discipline should be impersonal, objective, detached, does not mean that he should be a block of marble. It does mean that a combatant is not a good arbiter.
23. Evaluate threats as discipline agencies.
24. Evaluate: Pupils should be given more and more responsibility as they are able to take it. Do you agree with Kilpatrick's position, "We should take them as they are with reference to what they may become"?
25. Should a modern high school have a "court"?
26. Should a teacher want to be popular with his pupils?
27. Did the lieutenant below secure popularity legitimately?
When civilians were converted into soldiers during the days of the Great War, a good deal of time was given at first teaching them the regulations, customs, and technique of military courtesy and procedure. Among dozens of other things they were taught the use of the "hand salute." They were taught that a private soldier if

92 SYLLABUS IN PRINCIPLES OF EDUCATION

sitting should rise and salute a passing officer. The author remembers one lieutenant who was a jolly, slap-on-the-back type of man. If he were passing a group of men and they began to rise, he would smile, wave his hand in a friendly manner, and say, "Keep your seats, men; never mind." The men liked this and they liked him; he was temporarily very popular.

28. Does Miss Smith below purchase popularity legitimately? Let us suppose that Miss Smith is an eighth-grade teacher. As she crosses the hall one day at lunch time in the early part of October, Mary, an eighth-grade girl, comes out of the principal's office with tears trickling down her beautiful cheeks. Mary is a lovely girl with lovely hair and eyes. Miss Smith has come to like Mary a great deal; they have become very close personal friends. Miss Smith has been to dinner in Mary's home. All the members of Mary's family like Miss Smith. Incidentally, Mary's father is president of the Board. The most natural thing in the world for a woman to do under these conditions is to put her arm around Mary and say, "Mary, what can be the matter with you?" Whereupon Mary tells Miss Smith of the terrible "talking" the heartless principal has just given her in the office. It is not our purpose here to enter into the merits of the case in the office. That is not the issue. It is the most natural thing in the world under the conditions outlined above for Miss Smith and Mary to walk lunchward arm in arm, and, as the warm tears still course down those lovely cheeks, for Miss Smith to say, "Mary, I don't see how anyone could be so horrid to a girl like you." At home during the lunch Mary describes the principal as a cruel monster. But Miss Smith is wonderful; she "understands."
29. Evaluate: A good modern high school operates with perfect smoothness and without friction.
30. Evaluate: The purpose of a student government organization is to lessen the work of the faculty.
31. Distinguish between the "corrective" and "punitive" functions of punishment.
32. Should pupils be assigned school work to be done after school as a punishment?

33. Should pupils be required to write some passage of prose or poetry a certain number of times as a punishment?
34. Discuss the relation of "routinization" and "mechanization" to discipline.
35. Evaluate: "When the day closed, Marie Anderson always felt that her energy was all gone. She had poured out so much heart . . . given off so much of that magnetic force that plays on nerves and invisible chords that a long, solid sleep was necessary for recuperation."
36. In case of a controversy between a teacher and a pupil, is it a good plan for the pupil to write down his story of the affair?
37. Who was Simon Stylites? Evaluate his ideas relative to disciplinary or social control.
38. Evaluate: A mother called her daughter to her and said, "Mary, go up stairs, find out what Johnny is doing and tell him not to do it."
39. Distinguish between positive and negative morality.
40. Evaluate: A few weeks ago I heard a college woman in a great speech to members of her sex say, "Today, it is not enough that a woman be good; she must be good for something."
41. Evaluate: Last summer I heard a young man who was going out to teach in the fall say, "First of all, I will have order."
42. Should a good teacher be impartial? Do good teachers have "pets"?
43. Evaluate: I knew a teacher at one time who said to his pupils, "I like Mary Jones better than anyone in this class. I like her best because she is always on time, she does the thing she ought to do when she ought to do it, etc."
44. Evaluate: The spirit of the schoolroom of a great teacher is like a piece of music. The whole moves along with little or no effort.
45. Evaluate: I heard an old teacher a few days ago relate one of his former teaching experiences: "A boy started to sleep and I reprimanded him; he started to go to sleep the second time and I reprimanded him again. The third time he went completely to sleep and I thrashed him with the hose. After the thrashing I asked, 'John, why did you go to sleep in my class?' He said to me,

94 SYLLABUS IN PRINCIPLES OF EDUCATION

'Well, Mr. Smith, it is like this. I deliver papers. Sometimes I get to bed quite late. Last night the big snow tied up the cars. I had to walk a long distance. It was two o'clock when I got to bed. This morning I got up at five o'clock to deliver papers again. It is cold outside, and when I come in here it is warm. It just seems I can't keep from slipping off to sleep.'"

46. Does the statement that "love begets love" apply to discipline?
47. Evaluate: One year our high school had been fortunate in winning debates, oratorical contests, and the football championship. In regular parlance we had been "lucky." The mothers' club gave a big celebration banquet to all the contestants. Never as a principal did I have a better school spirit than in that school. After the dinner, which was held on the upper floor, was concluded and the people were enjoying social discussion, one of the teachers came to me and said, "I think you should go down to the first floor; the boys are having a gay time." As I went down I heard quite a disturbance. I soon recognized that an eraser fight was on. I stepped inside one of the doors to a lower room, and an eraser just missed my head. The boys, however, soon recognized it was the principal and ceased firing. I said, "Boys, let us get the janitor's equipment and clean up the mess." All of us did it together. Nothing further was ever said about it.
48. If you went into a school as a principal where a freshmen initiation had been a tradition for many years, would you issue an abolition decree?
49. Is sarcasm ever justifiable?
50. Should corporal punishment ever be used with high school pupils?
51. Should a woman ever attempt to handle physically a high school boy?
52. Discuss: A teacher should not be a mock queen on parade.
53. Discuss: A teacher should recognize that her pupils have a right to live.
54. Would it be well in the case of a difficult problem in discipline to call the parents of the community together and find out what they want done?

55. What does the phrase "in loco parentis" mean in relation to the control of a school?
56. Discuss: Joy is the normal condition of childhood and youth.
57. Do you believe time spent in "lecturing" pupils as to what they should or should not do, is usually well spent?
58. Discuss: Good teachers will not permit "trifling."
59. Miss Morehouse says the following types of teachers can scarcely expect to succeed in discipline. Do you agree?
 1. The ignorant and the crude.
 2. The conceited and bigoted.
 3. The weak-willed.
 4. The teacher ignorant of devices.
 5. The teacher whose life outside does not command respect.
 6. The teacher who is too much on the same level with pupils.
 7. The taskmaster and the tyrant.
 8. The teacher who wants to be popular above all.
 9. The lazy teacher.
 10. The threatener.
60. Should a man teacher be a "boy with the boys"?
61. Suppose you proceed as follows with a group of four cats:
 1. To No. (1) you say, "Kitty, kitty." It comes to you. You caress it and give it some very palatable food.
 2. To No. (2) you say, "Kitty, kitty." It comes to you. You caress it but do not give it any food.
 3. To No. (3) you say, "Kitty, kitty." It comes to you. You do not give it food and do not caress it. You sprinkle it with some cold drops of water.
 4. To No. (4) you say, "Kitty, kitty." It comes to you. You do not caress it and do not give it any food. You douse it with a pail of cold water.

What will occur if this experiment is repeated? Are we as teachers continuously caressing kittens?
62. Discuss Shakespeare's statement: "To thine own self be true; thou canst not then be false to any man."
63. Is it correct to say that, "Human nature is right"? Is it correct to say that, "Human nature is wrong"?

64. What influence does alphabetic seating have on discipline?
 65. Discuss: "What cannot be measured and scored in teaching is too hazy and indefinite to be of much value."
 66. What are "concomitant values" in learning?
 67. VRAY puts these words into the mouth of a beginning teacher. Evaluate: "Then Jean rose with her heart full of thoughts. What had the year done for her? It seemed a long time since that first morning when Mr. Martin had introduced her to the pupils. She had been an eager, light-hearted girl then, with little sense of responsibility. To help Joe she had learned to control her own naturally quick temper; love for Ellen had given her patience, while for Harry's sake she had become exceedingly careful of even the slightest statement. The old, careless, irresponsibility had gone forever, but life was richer, fuller, happier and sweeter than it had ever been before. If she had helped them, they had also helped her."
 68. Evaluate: One year the spring fever seized a dozen juniors and seniors in our high school. They left one beautiful afternoon to go to the woods to pick wildflowers. All the town knew about it immediately. They had purchased lunch at the several stores in the main part of the town. The next morning they came into my office in a group. They expected me to "lecture" them on the nature of their sin and the future abiding place of their souls. I said to them, "Well, you went to pick wildflowers. It was lovely out there, I am sure. I know you had a great party, all of you. It seems that all of us have to break loose once in a while in life. I, too, have to break loose sometimes. (They were breathing more easily here.) But, of course, when we break loose we have to be ready to pay. Good sportsmanship demands that we be ready to pay. And I know you are ready to do that. So, I am going to ask you people to remain with me after school for the next five days for an hour and a half each day."
- The pupils did their time after school and showed a good and happy spirit. I was leaving that spring to accept another position. That has been several years ago now, but I still have in a little leather wallet a little note which was left on my desk on the last day. It runs as follows:

"We enjoyed it out there,
We enjoyed it in here,
If you will come back to us next year,
We will agree to do it again.

Signed,

The Happy Dozen (names signed)."

69. Are you ever justified in giving a troublesome boy greater responsibilities?
70. Evaluate: A certain high school had been somewhat disorganized and confused. Mr. Brown came in as the new principal. In the first assembly meeting he said, "I want to give you a square deal." He then went on with some other matters. In the second assembly meeting he said, "There is one thing I want especially to do and that is to give you people a square deal." In the third assembly meeting he said, "Now, above all, I want to give you people a square deal, etc." In a short time he was known over the whole town as well as at the high school as "square deal" Brown.
71. Should a janitor in a school have any disciplinary responsibility?
72. What high school subjects are especially helpful in influencing the tone or discipline of a high school?
73. Those familiar with the psychology of the hog know that before a great storm hogs confined in a "pen" tend to run, squeal, grunt, and otherwise disport themselves. Do approaching storms affect children similarly? Why do even the best teachers think that on some days their children are devils, while at other times they are angels?
74. Evaluate: Normally, the principal must support the teacher against the pupil in matters of discipline.
75. Discuss the relation of athletics to discipline.
76. Evaluate the "friendly talk" as an agency in discipline.
77. How would you deal with the problem of cheating in an examination?
78. How would you deal with the problem of "stealing money"?
79. What do you think is the most important single factor in the teacher's equipment relative to the problem of discipline?

98 SYLLABUS IN PRINCIPLES OF EDUCATION

80. Evaluate: The modern teacher who teaches by modern methods has no problems of discipline.
81. What is your opinion of the pupil "apology"?
82. Evaluate: A good teacher sells his program and policies to at least 85 or 90% of his pupils.
83. Evaluate: In a good modern school "tattling" among pupils should be encouraged.
84. What is sublimation?
85. Can children be reared without any repression or coercion?
86. Discuss Professor Dewey's statement: "There cannot be two sets of ethical principles, one for life inside the school, and the other for life outside the school."
87. What is Dewey's distinction between "moral ideas" and "ideas about morality"?
88. Should the ideal to be looked forward to in the operation of a school be "absolute self-government"?
89. Should boys and girls be segregated in classes? In home-rooms?
90. Evaluate: A boy had been somewhat obstreperous in class. He habitually contradicted the teacher. She retained him after school one night and said, "John, why do you always contradict me? I don't mind to have you disagree with me, but I do dislike to have you always contradict me." With tears in his eyes he said, "Well, Miss Smith, I have seen too much of this world to believe what you and the book say."
91. Evaluate Jasper P. Palmer's statement: "A teacher who says the least and speaks in the lowest tone of voice commands the best discipline."
92. Evaluate: "Poor teachers make demands; good teachers make requests."
93. Evaluate: "An experienced teacher and a beginning one were discussing discipline. The first suggested to the second, 'Never touch dynamite with a match.'"
94. Is "sputtering" by the teacher ever justifiable?
95. Should an adult ever become angry at a child?
96. If a child has been "cuffed" about at home, as a general procedure, should the teacher adopt the same method?
97. Should a class be punished for the offense of one pupil?
98. Should a teacher recognize that a child has the right to be wrong?

99. Do children usually have a keen sense of justice?
100. What per cent of the average teacher's daily activities are activated by emotional considerations? Intellectual considerations?
101. In what secondary school grade would you expect the greatest number of behavior problems?
102. Would you expect pupils making rapid progress through school to furnish a comparatively large number of behavior problems?
103. Is intelligence related to behavior problems? How about the conduct of those at each end of the intelligence scale?
104. Is there some "X" element in discipline, the exact quantitative measurement of which can never be made?

BIBLIOGRAPHY

1. Douglass, A. A., Secondary Education, Chap. 17.
2. Johnson, Franklin W., Administration and Supervision of the High School, Chap. 8.
3. Dewey, John, Moral Principles in Education, (Entire book).
4. Colvin, S. S., Introduction to High School Teaching, Chaps. 4, 5, 6.
5. Cook, William A., High School Administration, Chap. 13.
6. Bagley, W. C., Classroom Management, Chaps. 7, 8.
7. Touton, F. C., and Struthers, A. B., Junior High School Procedure, Chap. 17.
8. Morehouse, F. M., Discipline of the School, Chaps. 9, 10, 11.
9. Moral Values in Secondary Education, U. S. Bulletin No. 51, 1917.
10. Belting, Paul E., The Community and Its High School, Chap. 10.
11. Norsworthy, Naomi, and Whitley, M. T., Psychology of Childhood, Chap. 13.
12. Cubberley, E. P., The Principal and His School, Chaps. 14, 15.
13. Ruediger, William C., and Strayer, G. D., The Qualities of Merit in Teachers, Journal of Educational Psychology, August 1910.

100 SYLLABUS IN PRINCIPLES OF EDUCATION

14. Strayer, G. D., and Engelhardt, N. L., *The Classroom Teacher*, Chap. 6.
15. Sears, J. B., *Classroom Organization and Control*, Chaps. 6, 7.
16. Johnston, Chas. H., *The Modern High School*, Chap. 14.
17. Wells, C. O., *Judicial Opinions Relating to Suspension and Expulsion from School*, *Elementary School Journal*, April 1927.
18. Charters, W. W., *Direct and Indirect Methods of Teaching Ideals*, *Elementary School Journal*, Jan. 1925.
19. Rich, Stephen G., *Teaching Them to be Lawless*, *Education*, Sept. 1925.
20. Bundy, Sarah E., *Provision for Moral Education of the Pupils in the Senior High School*, *Sch. Review*, Oct. 1926.

UNIT XI

EXTRA-CURRICULAR ACTIVITIES

1. What are extra-curricular activities?
2. Is this statement true: "No extra-curricular activity should ever become curricular"?
3. Justify extra-curricular activities in terms of modern psychology.
4. Should high school pupils have fraternities and sororities?
5. What is meant by a laissez-faire policy toward extra-curricular activities?
6. Should a regular time allotment be made in the daily program of a high school for extra-curricular activities?
7. Compare the two terms: "pupil self-government," "pupil participation in government."
8. Evaluate this statement: "No plan of self-government can succeed unless the pupils feel they are really independent."
9. Evaluate this statement: "A principal should have a student self-government organization in order to save the time of the faculty."
10. Should the high school principal preside at assembly meetings?
11. How often should high school assemblies be held? Who should plan the programs?
12. In general, what should be the attitude and function of the faculty in a program of extra-curricular activities?
13. Do extra-curricular activities have exploratory functions? How?
14. Give an illustration to show how extra-curricular activities may supplement the curricular.
15. Do adolescents have an inborn desire to organize? What is meant by the "gang spirit"?
16. Explain this statement: "Extra-curricular activities, as regards the school administrator, have passed through

three periods in their development: first, opposition; second, toleration; third, positive support."

17. Should extra-curricular activities be given greater emphasis in the senior or in the junior high school? Should they differ in type?
18. Should a pupil's participation in extra-curricular activities be limited?
19. Are junior high school pupils too young to have a student council?
20. Evaluate this statement: "The modern school should train 'in' rather than 'for' democracy."
21. Evaluate this statement of Prof. Dewey: "The school should be a typical embryonic community with democracy as its watchword."
22. List the most important aims of extra-curricular activities.
23. Are junior high school pupils old enough to assume serious responsibilities?
24. Should participation in extra-curricular activities be voluntary or compulsory?
25. Evaluate this statement in one-hundred words: "Responsibility, initiative, leadership, courtesy, etc., can best be developed through training in actual situations."
26. Explain Prof. Dewey's statement: "There is a positive as well as a negative side to character."
27. Evaluate this statement: "We have an interest in carrying out plans which we help make."
28. Should credit be given toward graduation for extra-curricular activities?
29. Should the school have any relationship to such organizations as Boy Scouts, Girl Scouts, Camp Fire Girls?
30. In a recent investigation, high school principals listed the following in order as the most baffling problems in the administration of extra-curricular activities. What suggestions can you make for dealing with each problem?
 1. To get adequate financial support.
 2. To find sufficient time.
 3. To secure trained faculty advisers.
 4. To restrict the number of activities.
 5. To regulate student participation.
 6. To develop student interest and initiative.

7. To keep activities from lowering scholarship standards.
8. To secure proper facilities: grounds, rooms, equipment, etc.
9. To keep legitimate organizations from becoming social groups.
10. To eliminate outside interference.
31. Evaluate Prof. Briggs' statement: "Student government is the original matrix for vital projects and the greatest opportunity for the development of citizenship."
32. Explain this statement of C. O. Davis: "The junior high school should be a school for junior citizens."
33. Explain the relation of extra-curricular activities to this statement: "The aim of education is social."
34. Explain this statement: "Extra-curricular activities help to integrate the personality of the pupil."
35. Is football a good extra-curricular activity for junior high school pupils?
36. What is a home-room?
37. Explain: "A system of extra-curricular activities cannot be transplanted."
38. Who should choose pupil leaders?
39. Is the present tendency toward intra-mural or interscholastic athletic contests?
40. Evaluate this statement: "'Win' should be the slogan of all athletic teams."
41. Evaluate this statement: "Athletics should be under the direction of the physical education department."
42. Should all high schools have a student newspaper?
43. Do extra-curricular activities "square" with our fundamental philosophy of individual differences?
44. Should junior high schools, as a rule, have social functions in the evening?
45. Where should high school social functions be held, as a rule?
46. How do extra-curricular activities square with Prof. Briggs' two fundamental aims of education:
 1. "To teach pupils to do better the desirable things they will do anyway.
 2. To reveal higher forms of activity, to make these activities desirable, and to an extent possible"?

47. Should extra-curricular activities be designed solely to develop leadership?
48. How does "equality of opportunity" apply to extra-curricular activities?

BIBLIOGRAPHY

1. Briggs, Thomas H., *Extra-curricular Activities in Junior High Schools*, Ed. Admn. and Supervision, Vol. 8: 1-9.
2. Douglass, A. A., *Secondary Education*, Chap. 22.
3. Fretwell, E. K., *Education for Leadership*, Teachers College Record, Sept. 1919.
4. McKown, H. C., *Extra-curricular Activities*, Chap. 1.
5. Pound, Olivia, *Need of a Constructive Social Program for the High School*, Sch. Review, March 1918.
6. Cox, P. W. L., *The Ben Blewett Junior High School—An Experiment in Democracy*, Sch. Review, Vol. 27: 345-359.
7. Counts, G. S., *Procedures in Evaluating Extra-curricular Activities*, Sch. Review, June 1926.
8. Fretwell, E. K., *Place of Extra-curricular Activities in Education*, Sch. and Society, June 30, 1925.
9. Foster, C. R., *Extra-curricular Activities in the High School*, Chaps. 1, 2.
10. Thomas-Tindal, Emma V., and Myers, Jessie D., *Junior High School Life*, Chap. 1.
11. Pickell, F. G., *Training for Citizenship through Practice*, Sch. Review, Sept. 1920.
12. Belting, Paul E., *The Community and Its High School*, Chap. 11.
13. Cook, William A., *High School Administration*, Chap. 14.
14. Cubberley, E. P., *The Principal and His School*, Chap. 26.
15. Johnston, C. H., and Others, *Junior-Senior High School Administration*, pp. 254-271.
16. Terry, Paul W., *Administration of Extra-curricular Activities in the High School*, Sch. Review, Dec. 1925 and Jan. 1926.
17. Masters, Joseph G., *Experiments in Democracy*, Sch. Review, Feb. 1927.
18. Dustin, C. R., *An Investigation of the Scope and Working Practices and Limitations of Pupil Participation in*

Government in Secondary Schools, Sch. Review, June 1926.

19. Jones, G., Three Principles Underlying Administration of Extra-curricular Activities, Sch. Review, Sept. 1925.
20. Briggs, Thomas H., The Junior High School, Chap. 10.

UNIT XII

GUIDANCE

1. Should change from one curriculum to another be difficult in the junior high school?
2. What is placement?
3. Should the school authorities encourage "job-hoboism"?
4. What is a vocational guidance counselor? What characteristics should he possess? Is the "efficiency expert" a good type?
5. Is it a good procedure for the school to send pamphlets and circular letters relative to the curriculum and courses to parents?
6. Do you agree with the following statement: "Vocational guidance is undemocratic; we should equip pupils in the school to control their own futures"?
7. Why is "guidance" really a corollary of "election of subjects" in the junior high school?
8. Should vocational guidance decide for young people in advance what occupation they should follow?
9. Evaluate: "Vocational guidance should be a continuous process designed to help the individual to choose, to plan his preparation for, to enter upon, and to make progress in an occupation."
10. Should the school assume a serious responsibility for guidance during the years from 12-18?
11. How do extra-curricular activities play an important part in guidance?
12. Is inferior mental ability an important factor in sending children early into industry?
13. Should instruction be modified so as to suit the needs of those who will drop out?
14. Would it be well to have English themes deal frequently with problems of vocational future?

15. Evaluate: Each individual should be given education to the extent or degree he is able to take it.
16. Do general psychological tests tell what vocation a pupil should follow?
17. What is a prognostic test?
18. What is the Stenquist "Mechanical Ability Test"?
19. Inside the school, distinguish between: personal guidance, remedial guidance, civic guidance, cultural guidance.
20. Distinguish between: vocational guidance, moral guidance, educational guidance, social guidance.
21. Hepner suggests the following points in the consideration of vocational choice. Is each significant?
 1. Desire for mental or physical activity.
 2. Social abilities.
 3. Ability to withstand persuasion.
 4. Poise.
 5. Care of details.
 6. Responsibility.
 7. Interest in broad plans.
 8. Venture: taking chances.
 9. Adaptability.
 10. Liking for quality in things dealt with.
 11. Outdoor vs. indoor work.
 12. Ability to entertain others.
 13. Conversational ability.
 14. "Expression in writing" ability.
 15. Public speaking ability.
 16. Ability to withstand criticism.
 17. Mechanical ability.
 18. Artistic ability.
 19. Mathematical ability.
 20. Musical ability.
 21. Physical condition.
 22. Financial condition.
22. Counts recently made a study showing the relative rank of forty-five vocations as they are regarded socially. Should children be given such information?
23. What is a "problem case" in the school?
24. What is a "helping teacher"?
25. What is meant by "follow-up"?

26. How should the school deal with these groups?
 1. Those who will drop out at compulsory age limit.
 2. Those who will remain in school from four to six years, but will not enter college.
 3. Those who will enter college.
27. What are "try-out courses"?
28. Who should have the decision, in the last analysis, as to what curriculum a pupil should enter?
29. Show how the following factors should enter into a counseling program for the high school:
 1. Previous scholarship.
 2. Educational tests.
 3. Attendance.
 4. Attitude toward work.
 5. Mental capacity.
 6. Chronological age.
 7. Future plans.
 8. Significant social data.
 9. Health.
30. How does "departmental teaching" affect the problem of guidance?
31. Should pupils be encouraged to undertake high school work unless we are fairly sure they will be able to finish?
32. Evaluate: Guidance should not be compulsion.
33. Should all high school graduates be encouraged to go to college?
34. Should pupils who will probably enter industry at the ninth grade be permitted to give as much as two-thirds of their time to vocational education?

BIBLIOGRAPHY

1. Douglass, A. A., Secondary Education, Chaps. 10, 11.
2. Chapman, J. C., and Counts, G. S., Principles of Education, Chap. 22.
3. Uhl, W. L., Principles of Secondary Education, Chap. 10.
4. Brewer, J. M., The Need for Vocational Guidance in Any Plan for Vocational Education, Ed. Admn. and Supervision, March 1920.
5. Williams, L. A., and Rice, G. A., Principles of Secondary Education, pp. 201-209.

6. Cook, William A., *High School Administration*, Chap. 16.
7. Foster, C. R., *Extra-curricular Activities in the High School*, Chap. 9.
8. Pechstein, L. A., and McGregor, A. L., *Psychology of the Junior High School Pupil*, Chap. 21.
9. Proctor, W. M., *The Use of Psychological Tests in the Vocational Guidance of High School Pupils*, Jr. of *Educational Research*, Sept. 1920.
10. Touton, F. C., and Struthers, A. B., *Junior High School Procedure*, pp. 27-34.
11. Dickson, Virgil E., *The Need of a Counseling Program in Secondary Schools*, Jr. of *Educational Research*, Jan. 1925.
12. Lyman, R. L., *Rochester Junior High School Plan*, Sch. Review, March 1920.
13. Counts, G. S., *The Social Status of Occupations*, Sch. Review, Jan. 1925.
14. Lyman, R. L., *The Guidance Program of the Holmes Junior High School*, Sch. Review, Feb. 1924.
15. Alltucker, M. M., *Counseling Plan for Bridging the Gap between the Junior and Senior High Schools*, Sch. Review, Jan. 1924.
16. U. S. Bulletin, No. 19, 1918, *Vocational Guidance in Secondary Schools*.
17. Madsen, I. N., *Contribution of Intelligence Tests to Educational Guidance in High School*, Sch. Review, Nov. 1922.
18. Clement, J. A., *Principles and Practices of Secondary Education*, Chap. 25.
19. Morrison, H. C., *The Practice of Teaching in the Secondary School*, Chap. 19.
20. Thomas-Tindal, Emma V., and Meyers, Jessie D., *Junior High School Life*, Chaps, 2, 3, 4, 6, 7, 8, 10, 11, 12.

UNIT XIII

VOCATION AND EDUCATION

1. Must a sound system of education take account of vocation?
2. Discuss the statement: In a strict sense all education should be vocational.
3. Discuss: Economic forces constitute the warp of the social order.
4. Discuss: "The modern man contends with our complex social and economic milieu just as the savage contended over hunting grounds and berry patches."
5. What problems for the secondary school have been created by the "Industrial Revolution"?
6. Evaluate Robinson and Beard's statement: "The story of the growth of civilization is the story of the substitution for the distaff of the marvelous spinning machine with its subtly flying fingers, etc. This story of mechanical invention is in no way inferior to the more familiar history of kings, parliaments, wars, treaties, and constitutions."
7. What is the significance of Ferrero's statement: "What has man dreamed of since the beginning of time but the earthly paradise, the Promised Land, the Garden of the Hesperides, the Age of Gold, Arabia Felix, and the same thing under different names: the empire of nature and abundance? And has not the great myth, the wild fantasy of a thousand years at last taken form and shape in those enchanted lands (America) beyond the ocean?"
8. What is meant by the narrow conception of vocational education? Broad conception?
9. Discuss the relation of vocational education to the following economic factors:
 1. Production
 2. Distribution

3. Consumption

4. Conservation

5. Service

10. Evaluate Ruskin's statement in his *Crown of Wild Olives*: "A man has a right to all he actually earns."
11. Evaluate: A business man received a telegram from a large corporation asking him to wire in return within one-hundred words what he considered the best way for labor and capital to get together. He wired back, "100 words is too much. The best way for labor and capital to get together is for them to get together."
12. Should the "middle man" in business be eliminated?
13. List the arguments for and against the "comprehensive" high school.
14. Evaluate: A prospective vocation should be evaluated by the candidate in terms of two criteria: First, what can I get from it? Second, what can I give to others and to the world?
15. Evaluate: The first demand of man in any vocation is that his efforts be adequately appreciated by the members of the group to which he belongs.
16. Should we dignify the garbage man? Should we dignify our "unknown soldiers" of industry?
17. Has Henry Ford been a social benefactor?
18. Do you give to beggars on the street? Justify your position.
19. Can monotonous labor ever be eliminated?
20. Evaluate Carlyle's statement: "We should regard laborers as men such that they would bleed if we should prick them with a pin."
21. According to Webster, "work" is synonymous with labor, toil, drudgery. Should it be?
22. Evaluate: "In the sweat of thy brow thou shalt eat bread."
23. How does the factory system tend to dehumanize work? How can personality be saved?
24. What are five main purposes of vocational education?
25. Evaluate Cox's statement: "The junior high school should be interested in those who are not interested in scholarship."
26. Evaluate: To be individually efficient is patriotic.

112 SYLLABUS IN PRINCIPLES OF EDUCATION

27. Evaluate: Broadly conceived, the ultimate test of all education is its utility.
28. Is this a sound philosophy—Each person should receive education to the extent he is able to take it?
29. Are the needs of the specialist and the non-specialist the same? What should the school do about it?
30. What is meant by "job analysis"?
31. What is an "error analysis"?
32. Evaluate Davenport's statement: "To better their condition through education is the abiding faith of all men everywhere."
33. Evaluate: A general education is one that fits for nothing in particular.
34. Evaluate: Every properly educated man is trained both vocationally and liberally.
35. What is a project? Explain how the project originated in the vocational field?
36. What is the Smith-Hughes Law?
37. Evaluate: Educationally, we need a redistribution of our working forces.
38. What is meant by "training on the job"? "Follow-up work"?
39. What is meant by "continuation" education? Does the school have a responsibility here?
40. Can vocational education be justified in terms of the two purposes of education of Professor Briggs:
 1. "To teach pupils to do better the desirable things they are going to do anyway.
 2. To reveal higher forms of activity; to make these activities desirable, and to an extent possible"?
41. Should vocational education parallel the processes of actual trade conditions, when convenient administratively?
42. Do dull pupils do well in industrial work?
43. Shall we expect that on the average the I. Q. of vocational pupils will be less than the I. Q. of academic pupils?
44. Should small or large projects be used generally for junior high school pupils?
45. Should all pupils in a course do the same projects?
46. Do Thorndike's three fundamental laws of learning—readiness, exercise, and effect—apply to industrial work?

47. Should shop "trips" ever come in school hours?
48. What are exploratory courses? Which is the exploratory year of the junior high school?
49. Evaluate Snedden's statement: "There can be no helpful vocational education which does not rest on a sound system of economics."
50. Evaluate: The spirit of the age is clearly away from laissez-faire and toward collective action in vocational education.
51. What are "rotation courses"?
52. Do inventions mean more or fewer needs?
53. Evaluate Bagley's conception: "An individual should carry his own weight with something left over."
54. Explain: "The voice of one crying in the wilderness does not command wages."
55. What is meant by the phrase, "square pegs in round holes"?
56. Is vocational education democratic?
57. Should men be educated to be employees?
58. Does the principal of a school have the right to predestine a pupil in the field of vocation?
59. What is extra-vocational training?
60. Evaluate Chapman and Count's statement: "The American village is the very real possible recipient of the services rendered to the world by Homer, Watt, Beethoven, Pasteur, Columbus, Arkwright, Darwin and countless others whose identity has long been lost."
61. Does training the hand in mechanical manipulation result in a corresponding mind alertness?
62. What is "related work" in the vocational field?
63. Discuss this statement: The first American colleges were pure vocational schools.
64. Should all high school pupils be required to take some work in the practical arts?
65. Evaluate Snedden's statement: "A man who has followed farming for several years is in many respects disqualified to become a counter salesman of drygoods, the actor disqualified to become a farmer, the machinist to become a bookkeeper, etc."
66. Should pre-vocational education in the junior high school be highly specialized?

67. Evaluate: "A worker is a perfected factory attachment as he surrenders himself to the time and rhythm of the machine and its functions; as he supplements without loss whatever facilities the machine lacks, whatever hampers the machine in the satisfaction of its needs. If it lacks eyes, he sees for it; he walks for it if it is without legs; and he pulls, drags, lifts, if it needs arms."

BIBLIOGRAPHY

1. Douglass, A. A., *Secondary Education*, Chap. 20.
2. Chapman, J. C., and Counts, G. S., *Principles of Education*, Chap. 14.
3. Inglis, Alexander, *Principles of Secondary Education*, Chap. 17.
4. Snedden, David, *Vocational Education in the United States: Principles and Issues*, *Sch. and Society*, Vol. 25: 636.
5. Kandel, I. L., *Twenty-five Years of American Education*, Chap. 11. (Chap. 11 is contributed by W. Thomas Woody.)
6. Bobbitt, Franklin, *The Curriculum*, Chaps. 7, 10.
7. Uhl, W. L., *Principles of Secondary Education*, pp. 481-484.
8. Clement, J. A., *Curriculum Making in Secondary Schools*, Chap. 18.
9. Johnson, Franklin W., *Administration and Supervision of the High School*, pp. 19-21.
10. Davis, C. O., *Junior High School Education*, Chap. 14.
11. *Cardinal Principles of Secondary Education*, U. S. Bulletin No. 35, 1918 (Entire).
12. Briggs, Thomas H., *Junior High School*, pp. 37-39; 45.
13. Hines, H. C., *Junior High School Curricula*, Chap. 6.
14. Baldwin, William, U. S. Bulletin No. 28, 1923, *Vocational Education*. (Entire bulletin.)
15. Roberts, William E., U. S. Bulletin No. 11, 1924, *Manual Arts in the Junior High School*.
16. Beckington, Lulu B., *Experiences With a Vocations Program in Home Room Organization*, *Teachers College Record*, Feb. 1927.

UNIT XIV

THE CURRICULUM

1. Should the school teach everything which pupils need to know in life?
2. Explain this statement: The basic question in curriculum making is not "what is good," but "what is best."
3. Evaluate: In the last analysis, the whole problem of the curriculum becomes one of "relative values."
4. What should be the basis for requiring certain subjects in the secondary school while others are elective?
5. Explain this statement: The curriculum should be based upon needs.
6. Should the curriculum be based upon adult needs, pupil needs, or both?
7. Explain this statement: A secondary school subject should have value to the extent taken.
8. What is the "job analysis" method of curriculum making?
9. Did Rousseau believe that the curriculum should be based upon the "felt needs" of pupils? Who are the leaders in this field of thought today?
10. Distinguish between immediate and deferred values in education.
11. Should any subject be in the curriculum solely on the basis of "transfer" value?
12. If you had the work of constructing a curriculum for a group of children, and could not rely in any degree on what has been done, what would you do?
13. Who are the leaders of the "scientific analysis" school of curriculum makers?
14. What is "curriculum tinkering"? Has it been of any value?
15. What is a scientific method for finding what arithmetic is used by the average housewife?

16. What is meant by Kilpatrick's statement: "There is an inseparability between subject matter and method"?
17. What is subject matter?
18. Evaluate this statement: "Subject matter furthers action which has been balked."
19. Does the "job analysis" method of curriculum making provide for the future needs of pupils? If not, how are future needs to be met?
20. Is the present tendency toward greater or less flexibility of curriculum?
21. Explain the statement: No system of vocational education is complete which does not provide for extra-vocational needs.
22. Should the psychological nature of children be considered in arranging curriculum materials?
23. What is meant by the logical arrangement of curriculum materials? Psychological?
24. What is an "error analysis"? "Difficulty analysis"?
25. Who should write textbooks?
26. What does Bobbitt mean by "directed" and "undirected" training?
27. Explain Charter's statement: "The major objectives of education should be analyzed into ideals and activities; the ideals and activities should be analyzed into working units."
28. Explain Charter's statement: "Inasmuch as an individual curriculum for all pupils is not possible, the good teacher continues the analysis and translates the curriculum for the pupil."
29. Explain: The size of workable units is dependent upon the learner.
30. Explain: "Selection of materials for the curriculum should be made from the fields of organized and unorganized knowledge."
31. Explain: Broadly interpreted, the curriculum can have no function other than "utility."
32. Should changes in the public schools always keep abreast of theory?
33. Does information have any value apart from its "function"?

34. Should a secondary school pupil expect any value from one year of French?
35. Should civic education and vocational education be divorced?
36. Explain: The curriculum of the secondary school should provide for both "integration" and "differentiation."
37. Should colleges dictate to the high schools what they should teach?
38. Explain: "No subject should be included in the curriculum of the secondary school for which an affirmative case cannot now be made out."
39. Is transfer of training from one field of learning automatic and inevitable?
40. Should pupils study the hard and distasteful for its own sake?
41. How do curriculum materials in the junior high school have an exploratory function?
42. Explain the statement: Curriculum materials should contribute to one or all of the "Seven Cardinal Principles of Secondary Education."
43. Who should make the curricula of our public schools?
44. Should the curriculum of a school ever become fixed and static?
45. Is there any place in modern curriculum making for a *priori* judgment?
46. Will a desirable curriculum give the same training to the specialist and the non-specialist?
47. Should "social inheritance" be given any consideration in curriculum making?
48. Should higher standards exist in required or in elective courses?
49. Should the curriculum be the joint product of the sociologist, the psychologist, and the administrator?
50. What is meant by "minimum essentials" in curriculum making?
51. Should transfer from one curriculum to another in the secondary school be relatively easy?
52. What courses should be required in the junior high school?
53. Evaluate the statement: A curriculum is not a curriculum until it has been taught.

118 SYLLABUS IN PRINCIPLES OF EDUCATION

54. Is the mastery of elementary school work invariably essential to the acquisition of later offerings?
55. Evaluate: Variety and continuity are two principles of curriculum making.

BIBLIOGRAPHY

1. Douglass, A. A., *Principles of Secondary Education*, Chap. 21.
2. Uhl, W. L., *Principles of Secondary Education*, Chap. 15.
3. Johnson, Franklin W., *Administration and Supervision of the High School*, Chap. 17.
4. Cox, P. W. L., *Curriculum Making in the Secondary School*, Chap. 3.
5. Williams, L. A., and Rice, G. A., *Principles of Secondary Education*, Chap. 4.
6. Clement, J. A., *Curriculum Making in Secondary Schools*, Chap. 4.
7. Inglis, Alexander, *Principles of Secondary Education*, Chap. 20.
8. Charters, W. W., *Curriculum Construction*, Chaps. 1-10.
9. Bobbitt, Franklin, *The Curriculum*, Chaps. 1-6.
10. Briggs, Thomas H., *Curriculum Construction in the High School*, *School Review*, Jan. 1923.
11. Briggs, Thomas H., *Curriculum Problems*, (Entire book).
12. *Cardinal Principles of Secondary Education*, U. S. Bulletin No. 35, 1918, pp. 11-16, 21-24, 27.
13. Briggs, Thomas H., *The Junior High School*, Chap. 6.
14. Uhl, W. L., *Secondary School Curricula*, Chap. 16.
15. Bode, Boyd H., *Determining Principles of Curriculum Construction*, Ed. Admn. and Supervision, Vol. 12: 217-228.
16. Davis, C. O., *Junior High School Education*, Chap. 7.
17. Kilpatrick, W. H., Jr. of *Educational Method*, Nov. 1922; Feb. and May 1923.
18. Bonser, F. G., *The Elementary School Curriculum*, Chap. 1.
19. Harap, Henry, *A Critique of the Present Status of Curriculum Making*, *Sch. and Society*, Feb. 19, 1927.

20. Twenty-sixth Yearbook of the National Society for the Study of Education, Part 2.
1. Bagley, William C., pp. 29-40.
 2. Bobbitt, Franklin, pp. 41-56.
 3. Bonser, F. G., pp. 57-69.
 4. Counts, G. S., pp. 73-90.
 5. Courtis, S. A., pp. 91-98.
 6. Horn, Ernest, pp. 99-112.
 7. Judd, Chas. H., pp. 113-117.
 8. Kilpatrick, W. H., pp. 119-146.
 9. Rugg, H. O., pp. 147-164.
 10. Dewey, John, pp. 165-187.

UNIT XV

TRANSFER OF TRAINING

1. Do all arguments for transfer of training have their basis in the faculty psychology?
2. What is the function of a control group in a transfer experiment?
3. Is the amount of improvement in any function or capacity usually accompanied by an equal improvement in other functions?
4. Do we expect more transfer as functions become more unlike?
5. Of one hundred college freshmen one-half had studied Latin in high school and one-half had not. The average mark in all college work of the first fifty in the freshman year of college was 90%; of the second fifty, the average mark was 75%. Does this show the value of Latin?
6. Do pupils who produce neat papers in arithmetic also produce neat papers in language and spelling?
7. Evaluate this statement: The first question that should be asked before any subject is included in the curriculum should be, "What is its transfer value?"
8. Discuss the epoch-making experiments of Thorndike and Woodworth on the problem of transfer. What were the three groups of experiments? What has been the significance of these experiments?
9. Explain James' statement: "All improvement of memory consists in the improvement of one's habitual methods of recording facts."
10. What is meant by identical element? What are the two kinds of identical elements according to Thorndike?
11. Evaluate this statement: "What is hard and distasteful to a pupil has important disciplinary value for him."

12. Does one subject have as much disciplinary value as another, assuming that both are equally well taught?
13. Was Latin originally placed in the curriculum because of its transfer value?
14. Explain Judd's theory of "generalization."
15. Does a knowledge of English grammar insure correct speech?
16. Evaluate these statements in terms of the transfer problem:
 1. He is a man of courage.
 2. Mathematics trains the reasoning powers.
 3. Science trains in observation.
 4. The type of education should be disciplinary rather than practical.
 5. A cultural power is gained from a study of the liberal subjects.
17. Does promptness in getting to school lead to promptness in all life's activities?
18. Is the woman who is neat in dress when in public also neat in her clothes-press?
19. Does the teacher who invariably insists on neatness from her pupils always keep her own private home desk immaculately neat?
20. Do we gain power by doing the hard thing?
21. Does training the right hand strengthen the left?
22. Can the memory be trained?
23. Does ability developed in football transfer to basket-ball?
24. Does sledge-hammer practice aid or hinder ability in embroidery work?
25. Does ability in scoring "touchdowns" transfer to "second paraphrastics"?
26. Is a sprinter necessarily a good walker, or vice versa?
27. Do "cultural" and "disciplinary" now mean the same? Do some subjects give a cultural value?
28. Does learning to do one thing help in some way, though small, to do any other particular thing later?
29. Should any subject be taught because of its disciplinary value alone?
30. Have you ever used Latin outside of a classroom?
31. Does ability developed in proof-reading hinder or aid ability in silent reading?

32. Does ability developed in addition transfer to multiplication? Why?
33. Evaluate: "Transfer of training from one field to another is automatic and inevitable."
34. Explain: "Transfer may be either positive or negative."
35. Discuss: "The degree of transfer depends upon the teacher."
36. Does the true-false test have any relation to the problem of transfer?
37. How is the project method of teaching concerned with the transfer problem?
38. Morrison speaks of "direct learners," "lesson learners," and "transfer learners." What does he mean?
39. Explain: Transfer is enhanced by the focalization of consciousness upon the element to be transferred.
40. The following "pet phrases" represent the points of view of the following men. Explain each:
 1. JAMES—"Habitual methods of recording facts."
 2. BAGLEY, RUEDIGER, RUGER—"Transfer through ideals."
 3. THORNDIKE and WOODWORTH—"Identical elements."
 4. JUDD—"Generalization."
 5. BODE—"Transfer through concepts."
 6. FOSTER—"Identical ability conditioning factors."
 7. COOVER and ANGELL—"Divesting the essential process of non-essential factors."
 8. EBERT and MEUMANN—"Technique of learning, attentiveness, will-power."
41. Outline briefly an experiment of the following men, giving method and results:
 1. James.
 2. Bagley.
 3. Thorndike and Woodworth.
 4. Judd.
42. Explain the relation of Gates' statement to the problem of transfer: "We learn the reaction that we make, not something else."
43. Explain: "Transfer is enhanced by the recognition of identical elements."
44. What is meant by "formal discipline"?

45. Does a pupil gain as much cultural value from the study of oats and barley as from the study of English literature?
46. Explain the following theories of transfer:
 1. The central energy theory—the mind is like a gas tank.
 2. Faculty psychology.
 3. Generalized habit.
 4. Habits are specific.
47. Does this statement of Bagley have any connection with the problem of transfer: "A review should be a new view"?
48. Do psychologists today believe in transfer of training?
49. Discuss Bennett's statement: "A broom-stick may be used for a cane, but its original performance will in no way affect its second performance."
50. Discuss Russell's statement: "The course of study of the German boy aimed not at making him a German boy, but a Greek orator."
51. Should there be a transfer from elementary mathematics to higher mathematics?
52. Explain Thorndike's statement: "Finally, it must be remembered that a very small spread of training may be of great educational value if it extends over a wide enough field."
53. Discuss Judd's statement: "There is a general phase to every experience."
54. Discuss Judd's statement: "We may make of our pupils larger seekers after truth, or we may make of them bigoted little dogmatists. What we do will depend very much upon what we and our interests are."
55. Discuss Thorndike's statement: "Improvement in any mental function rarely brings about equal improvement in any other mental function no matter how similar, for the working of any mental function group is conditioned by the nature of the data in each individual case."
56. Discuss Bode's statement: "Given a wide range of application, our meanings become indefinitely transferable until, like a woman's hairpin, they can be used for almost any purpose."
57. Make a list of suggestions for teachers for securing greater transfer.

BIBLIOGRAPHY

1. Colvin, S. S., *The Learning Process*, Chaps. 14, 15, 16.
2. Gates, A. I., *Psychology for Students of Education*, Chap. 15.
3. Thorndike, E. L., *Educational Psychology*, Vol. 2, Chap. 12.
4. Thorndike, E. L., and Woodworth, R. S., *Psychological Review*, Vol. 8: 247 ff., 384 ff., 553 ff.
5. Bode, Boyd H., *Educational Admn. and Supervision*, March 1919.
6. Judd, Chas. H., Angell, J. R., Pillsbury, W. B., *Educational Review*, June 1908, pp. 1-42.
7. James, William, *Principles of Psychology*, Vol. 1, Chap. 16.
8. Ruediger, William C., *Educational Review*, Vol. 36: 364-371.
9. Bagley, W. C., *Educative Process*, Chap. 13.
10. Woodrow, Herbert, *The Effect of Type of Training upon Transference*, Jr. of *Educational Psychology*, March 1927.
11. Inglis, Alexander, *Principles of Secondary Education*, pp. 394-412.
12. Judd, Chas. H., *Psychology of Secondary Education*, Chap. 19.
13. Bennett, Chas. J., *Formal Discipline*, (Entire book).
14. Williams, L. A., and Rice, G. A., *Principles of Secondary Education*, pp. 244-261.
15. Thorndike, E. L., *Mental Discipline in High School Studies*, Jr. of *Educational Psychology*, Jan. and Feb. 1924.

UNIT XVI

INSTRUCTION

1. Do we believe in modern education that pupils should do the hard thing merely for its own sake?
2. Should formal discipline be an important aim in teaching?
3. Discuss: "Purposeful activity" is probably the most significant idea in modern teaching.
4. Distinguish between the logical and the psychological methods of teaching. Which seems more desirable for junior high school?
5. Evaluate Dewey's statement: "Real interest consists in the identification of the self with the materials that are to be learned."
6. Discuss Dewey's statement: "Interest and effort should not be divorced."
7. What is "individualized instruction"? Where is the outstanding work being done in this field?
8. What is supervised study? List some arguments for and against it.
9. What is a socialized recitation? What are some of its characteristics?
10. What is the project method? What is the philosophy underlying it?
11. What is departmental teaching? Indicate advantages and disadvantages.
12. What do you consider the best method for teaching civic education?
13. Do different subjects have different techniques?
14. Evaluate this statement: The content and teaching methods of every study should be adapted to the capacities, interests, and needs of pupils.
15. Should we constantly aim at interest in our teaching?
16. Should pupils in the secondary school be trained for leadership? Followership? Both?

17. What is intrinsic interest? Extrinsic interest?
18. Should moral considerations be kept constantly uppermost in teaching?
19. Should competition and rivalry among pupils be eliminated from classrooms?
20. Will knowledge of the right usually guarantee the doing of the right?
21. Should there be two sets of ethical principles—one for life inside the school, the other for life outside the school?
22. Is a pupil's affection for his teacher a high motive for a pupil's doing his work?
23. Does a large number of questions by the teacher in the recitation indicate good teaching?
24. Should pupils be exempt from final examinations for good work?
25. Should a pupil's deportment be considered in determining his final mark in a course?
26. Evaluate this statement: A teacher should be both "machinist" and "artist."
27. Should there be a definite time in the class period for the assignment?
28. Is this statement true: The chief business of the teacher in the recitation is to teach?
29. Evaluate this statement: The great fundamental principles of learning are the same for the child, the youth, and the adult.
30. Should high school teachers in general give instruction in their classrooms on problems of sex?
31. Does the lecture method have an important place in high school teaching?
32. Evaluate this statement: Methods are but the expression of the philosophy underlying them.
33. Evaluate this statement: "Outlooks and overviews rather than mastery of specialized and limited portions of subject matter should in general be the goal of instruction in the junior high school."
34. Should a teacher reveal to pupils methods for checking up on their own work?
35. Can any teacher teach well any subject which she actually knows?
36. Must a good teacher have a lesson plan?

37. Does the word "recite" have a desirable connotation to the good teacher?
38. Should well-trained teachers use textbooks, as a rule, in their courses?
39. Do you agree with Holley's statement: "The recitation is intended primarily as a means of ascertaining whether the pupils have prepared the tasks set for them in the assignment"?
40. Evaluate this statement: Pupils in the recitation should be interested chiefly in giving the teacher what she wants.
41. Explain: "Each bit of subject matter is only a bit of human experience,—the way men think, feel, and act."
42. Evaluate: Nothing should be taught in such a way that it will have to be unlearned later.
43. Should method be conceived as a device for getting the child to learn certain predetermined subject matter?
44. Is it true that a good teacher always follows the Herbartian procedure?
45. Should a pupil ever be asked to learn anything he does not thoroughly understand?
46. Evaluate Bagley's statement: "A review should be a new view."
47. Should all lessons be "red letter" lessons?
48. Evaluate: "Many so-called harder subjects owe their difficulty not so much to inherent complexity as to the method of presentation."
49. Evaluate: In the beginning of a course, for example, English, history, etc., the usefulness and reasonableness of it should be established "once and for all."
50. Evaluate: If home work is required, there should be a kind of gentleman's agreement among members of the faculty relative to the amount.
51. Evaluate: My pupils have an unquestionable right and equally an unavoidable obligation to contribute everything within their power toward the education of their classmates.
52. Evaluate: "We may lead a horse to water but we cannot make him drink; we may lead a pupil to information but we cannot make him think."
53. What are "concomitants" in teaching? Evaluate their importance.

54. What is the meaning of Kilpatrick's phrase: "Activity leading to further activity"?
55. Explain the statement: Learning is reacting.
56. Does the modern point of view in education place emphasis on "thinking" and "problem solving"?
57. Explain Dewey's statement: "Education should be the reconstruction of experience."
58. Explain: Methods of teaching should correspond to methods of learning.
59. Evaluate: Sound teaching procedures must take account of original instincts and emotions.
60. Is the present tendency toward less home work?
61. Should teachers assume an important responsibility for the study habits of pupils?
62. Evaluate: There are both spiritual and technical phases of teaching.
63. Evaluate: "The critical question in any type of teaching should always be, 'what new attitude or ability' am I trying to bring about in these pupils."
64. Explain: The experiential horizons of pupils vary greatly.
65. Explain: The best modern teaching is done by "units."
66. Evaluate: In general, all teaching should be direct teaching.

BIBLIOGRAPHY

1. Chapman, J. C., and Counts, G. S., *Principles of Education*, Chap. 23.
2. Morrison, H. C., *The Practice of Teaching in the Secondary School*, Chaps. 1, 2, 3, 4.
3. Dewey, John, *How We Think*, Chap. 6.
4. Dewey, John, *Interest and Effort in Education*, (Entire book).
5. Kilpatrick, W. H., *Foundations of Method*, Chaps. 8, 9.
6. Parker, S. C., *Methods of Teaching in High Schools*, Chap. 9.
7. Clement, J. A., *Principles and Practices of Secondary Education*, Chaps. 5, 6.
8. Douglass, Harl R., *Modern Methods in High School Teaching*, Chap. 1.
9. Williams, L. A., and Rice, G. A., *Principles of Secondary Education*, Chap. 5.

10. Symposium—Dangers and Difficulties of the Project Method—Kilpatrick, Bagley, Hosic, etc., Teachers College Record, Sept. 1921.
11. Horn, John L., Five Proposals for the Improvement of Secondary School Instruction, Sch. and Society, Jan. 22, 1927.
12. Bode, Boyd H., Fundamentals of Education, Chap. 6.
13. Thorndike, E. L., Education for Originality and Initiative, Teachers College Record, Dec. 1927.
14. Bagley, W. C., Classroom Management, Chap. 13.
15. Nutt, Wilbur, Principles of Teaching High School Pupils, Chap. 3.
16. Hall-Quest, A. L., Supervised Study, Chaps. 1, 2.
17. Mossman, Lois C., Changing Conceptions Relative to Lesson Planning, Ed. Admn. and Supervision, May, 1925.

UNIT XVII

THE TEACHER

1. Evaluate the following statement of Elbert Hubbard in its relation to the work of the teacher: "If you work for a man, in Heaven's name work for him. If he pays wages that supply your bread and butter, work for him, speak well of him, think well of him, stand by him and stand by the institution he represents. I think if I worked for a man, I would work for him. I would not work for him a part of his time, but all of his time; I would give him an undivided service or none. If put to a pinch, an ounce of loyalty is worth a pound of cleverness. If you must vilify, condemn, and eternally disparage, why, resign your position and, when you are outside, damn to your heart's content. But, I pray you, so long as you are part of an institution, do not condemn it. Not that you will injure the institution—not that—but when you disparage the concern of which you are a part, you disparage yourself. And don't forget, 'I forgot' won't do in business."
2. Evaluate Bagley's statement: "Teaching should be conceived as a fine art."
3. Evaluate: The teacher should be both artist and machinist.
4. Compare the teacher's rôle with that of those engaged in "rule-of-thumb" trades.
5. Evaluate: John and Mary were conversing on the deck of a ship one day. John claimed that he could tell from the appearance of an individual what was his vocation. Mary disputed his claim. She asked, "What is the work of that man over there?" John said quite confidently, "Of course, he is a teacher." Mary said, "I'll bet he isn't." Whereupon it was agreed that John should go over and ask him. So he went to the man and said,

"Pardon me, sir, but you are a teacher, aren't you?"

The man said, "No, I am only sea-sick."

6. Evaluate: St. Peter heard a knock at the door. He said, "Who's there?" The reply came back, "It's me." St. Peter said, "Enter." St. Peter heard a second knock at the door. He said, "Who's there?" The reply came back, "It's me." St. Peter said, "Enter." St. Peter heard a third knock at the door. He said, "Who's there?" The reply came back, "It is I." St. Peter said, "Another one of those old school teachers. Send her down the other way."
7. Discuss Palmer's statement: "A teacher should be ready to be forgotten."
8. Discuss: A teacher should get his reward from day to day. At the close of each day he should feel that he has been paid up-to-date.
9. Discuss Bagley's statement: "The teacher should feel a kind of trusteeship for the social inheritance."
10. Should a high school teacher have a higher "I. Q." than an elementary school teacher?
11. Should a principal know the "I. Q." of his teachers?
12. What is the relative importance of "personality" and "I. Q." in high school teachers as compared with elementary school teachers?
13. During a "World Series" some time ago Babe Ruth made three home runs in one game. Is the following statement true—"All high school teachers should know this fact before dinner the following day"?
14. List ten ways by which a teacher may improve herself in service?
15. Explain the statement of James E. Russell: "In education we have teachers who are followers of the 'totem' and the 'sphinx.'"
16. Discuss the importance of the "human touch" in teaching. What is meant by "personal interest"?
17. Would the "human touch" prevent diphtheria? What relation does this question have to a knowledge of scientific education? Discuss, "In order to accomplish his best work, every teacher should be keen to advance in an increasing mastery of his field of study, and if possible to add to it fresh and interesting material; otherwise,

132 SYLLABUS IN PRINCIPLES OF EDUCATION

his teaching becomes formal and stale, and fails to secure helpful results with the student."

18. Discuss: It is the business of the teacher to impart knowledge.
19. Are high school teachers given more social recognition than elementary school teachers? Should it be so?
20. Evaluate: "The public schools are taught by a mob of mobile maidens meditating matrimony."
21. Does teaching at the present time offer promise as a life career?
22. Should a teacher want to be popular with his pupils?
23. Compare the attention of the public press, some time ago, given to the death of Valentino as compared with that of Chas. W. Elliott. What deductions do you make?
24. Discuss: In the relationships of one teacher with another we need a high type of "professional sportsmanship."
25. What does Bagley mean when he speaks of the "master teacher"?
26. What does this statement mean, "Mark Hopkins at one end of a log and a student at the other, made a university"?
27. Discuss Emerson's statement, "What you are speaks so loud I cannot hear what you say," in its application to the teacher.
28. Evaluate: "When the day closed, Marie Anderson always felt that her energy was all gone. She had poured out so much heart—given off so much of that magnetic force that plays on nerves and invisible chords that a long, solid sleep was necessary for recuperation."
29. Evaluate this statement of William Lyon Phelps: "I do not know that I could make entirely clear to an outsider the pleasure I have in teaching. I had rather earn my living by teaching than in any other way. In my mind teaching is not merely a life work, a profession, an occupation, a struggle: it is a passion. I love to teach. I love to teach as a painter loves to paint, as a musician loves to play, as a singer loves to sing, as a strong man rejoices to run a race. Teaching is an art—an art so great and so difficult to master that a man or woman can spend a long life at it, without realizing much more than his limitations and mistakes, and his distance from the ideal. But the main aim of my happy days has been to

become a good teacher, just as every architect wishes to become a good architect, and every professional poet strives toward perfection."

30. Discuss this statement of Frank McMurry: "The greatest function of the teacher is to help students find themselves."
31. Discuss also this statement of McMurry: "How would I plan, if I could live my life over again, guided by my present knowledge? I would go into teaching, of course; but I would make far more directly for the biggest thing in teaching than I ever have in the past. What is it? Let us see. The biggest lack among students is not ability but fire. It is a lack of flaming purposes. Accordingly, the leading test of my instruction that I have applied for many years has been the extent to which I could get my students excited over educational ideas. If, after a class period was over, they lingered in the halls in discussion and carried the discussion over into the lunch period, I felt encouraged and if, now and then, in their excitement they showed a fighting spirit in consequence of the convictions they had reached, I felt that my instruction was attaining a reasonable degree of success."
32. Glenn Frank, in a recent article, says, "The future of America is in the hands of two men—the investigator and the interpreter." He says that we are in dire need of "salesmen of knowledge." Should teachers be "salesmen of knowledge"? How does the following statement of Frank apply to the role of the teacher or of particular teachers—"Many negro mammies of the South can make a strawberry shortcake that would tempt the appetite of the gods, but they might cut sorry figures as domestic science lecturers."
33. Evaluate this statement of Chapman and Counts:
"Greeting his pupils, the master asked:
What would you learn of me?
And the reply came:
How shall we care for our bodies?
How shall we rear our children?
How shall we work together?
How shall we live with our fellowmen?
How shall we play?
For what ends shall we live?"

And the teacher pondered these words,
and sorrow was in his heart, for his own
learning touched not these things."

34. Explain the following statement of Miss Florence Bamberger: "Before securing movable furniture in a school, it is essential to secure a teacher with a movable point of view."
35. Evaluate the following statement: "Teaching will be made a profession just like other lines of work have been made professions; when teachers can demand sufficient respect."
36. Evaluate the following statement of E. J. Ashbaugh: "No young man should aspire to a permanent place in educational work who does not at the same time foresee for himself a marked measure of success. Educational work should not be considered as an easy berth to a life of mediocrity. He who is looking forward to a professional career should determine whether or not he possesses superior ability, both mental and social. If he is to keep pace with the growth of the science of education he must be able mentally to keep pace with thinkers in the field. He who expects to be a success in leading children to think, must be capable of constructive thought, of more than parrot repetition. If he hopes to rise to a position of large responsibility, he must possess social intelligence which will enable him to interpret his community and adjust himself to the changing social order. To these qualifications he should add a genuine love for children and a devotion to service. Love of books is not sufficient, for the teacher's fundamental function is neither to know books nor to teach books but to know and to teach children."
37. In what way is teaching a form of immortality?
38. Do you agree with the following statement of S. B. Davis: "The great teachers have also been great scholars. Their pupils have learned their methods of work, thinking attitudes, and joy in learning for its own sake"?
39. Evaluate Harry C. Humphrey's statement: "The teacher who is really on fire will not give the appearance of nervously doing a great deal of work, bustling here and there, and trying to impress pupils with a hustling kind of

mistaken dynamic force which she tries to artificially create. The psychology of such movements is that of one thinking, 'I must be on fire,' and making oneself believe she is when it is only the outward manifestation of what some think must accompany the genuine 'fire,' which comes only through deep abiding purposes and motives. These will be wrought out into action with the useless movements and bluster eliminated. We say of such teachers, they have fine poise. And poise of the effective kind is the result of such organization of one's thinking as to give confidence, stability, and purpose to one's action. Many novices in teaching lack poise because they are lacking in purposes and motives."

40. The following have been suggested as the four outstanding criteria of professional service. Does teaching meet these criteria?
 1. It must be performed as a social service.
 2. It requires expert knowledge.
 3. It requires initiative and resources adequate to meet changing needs.
 4. It requires an ethical co-operation.
41. Explain: "A teacher should be his own employer."
42. Do you agree with the following: "A teacher should see his work as from the apex of a cone rather than the center of a sphere"?
43. Should there be a permanent tenure plan for teachers?
44. Evaluate Bagley's statement: "Nothing could give greater force and wider influence to our professional recommendations than the feeling on the part of a citizen that the teachers of his children and of his neighbor's children, are masters of the art of teaching."
45. What is the average number of hours required in "Education" for high school teaching? What is the requirement of your own state?
46. Indicate the significance of John Bassett Moore's statement: "When I learned that there were many members of the Peace Conference who considered the most brilliant and best-trained diplomat in Paris my pupil, Wellington Koo of the China Mission, I had my unalloyed reward."
47. Do "efficiency ratings" of teachers have value?

48. Appraise Buckingham's statement: "The teacher's occupation is fascinating. He has children to study—not stones, bugs, fossils or old manuscripts, but the most interesting of all possible materials—namely human beings."

BIBLIOGRAPHY

1. Chapman, J. C., and Counts, G. S., *Principles of Education*, Chap. 24.
2. Uhl, W. L., *Principles of Secondary Education*, Chap. 4.
3. Colvin, S. S., *Introduction to High School Teaching*, Chap. 3.
4. Klein, Gertrude, *The Promotion of Scholarship in Teachers of the Secondary Schools of the United States*, *Teachers College Record*, Sept. 1926.
5. Davis, C. O., *Training Secondary School Teachers in American Universities*, *Sch. and Society*, May 28, 1927.
6. Osborn, W. J., *Personal Characteristics of the Teacher*, *Ed. Admn. and Supervision*, Feb. 1920.
7. Buellesfield, Henry, *Causes of Failure among Teachers*, *Ed. Admn. and Supervision*, Sept. 1915.
8. Bliss, W. B., *How Much Ability Does a Teacher Need*, Jr. *Educational Research*, June 1922.
9. Thayer, V. T., *Teacher Rating in Secondary Schools*, *Ed. Admn. and Supervision*, Sept. 1926.
10. Powers, J. Orin, *The Ethics of the Teaching Profession*, Jr. *of Educational Research*, Nov. 1925.
11. Morrison, Robert H., *Factors Causing Failure in Teaching*, Jr. *of Educational Research*, Sept. 1927.
12. Howe, C. M., *Teachers Ethics as Viewed by Teachers*, *Sch. and Society*, Nov. 1922.
13. Davis, S. E., *The Work of the Teacher*, Chap. 12.
14. Bagley, W. C., and Keith, J. A., *Introduction to Teaching*, Chap. 11.
15. Skinner, J. A., *Professional Standards for Classroom Teachers*, N. E. A. *Proceedings*, 1922.
16. Wilson, T. H., *Some Perils of the Teaching Profession*, Jr. *of Education*, April 30, 1925.
17. Palmer, G. H., *The Ideal Teacher* (Entire essay).
18. Bagley, W. C., *School Discipline*, Chap. 14.

UNIT XVIII

THE NEW EDUCATION

1. The theory of "formal discipline" has been chiefly overthrown.
2. Development at adolescence is chiefly gradual rather than saltatory.
3. A pupil should not do a hard thing merely for its own sake.
4. Punishment should be chiefly corrective rather than punitive.
5. Modern education places the emphasis on self-realization of pupils.
6. Education is not a preparation for life; it is life itself.
7. Concomitants in teaching are very important.
8. "Activity leading to further activity" should be a basic principle of all education.
9. "Interest" and "effort" in learning should not be divorced.
10. As Briggs says, "The school should teach pupils to do better the desirable things they will do anyhow."
11. As Briggs says further, "The school should reveal higher forms of activity, make these activities desirable, and to an extent possible."
12. A school subject should have value to the extent taken.
13. A school subject should contribute to one or more of the "Cardinal Principles of Education."
14. The pupil is more important than subject matter.
15. The child learns only through his own reactions.
16. The main purpose of the junior high school is to provide for individual differences.
17. Modern education places much emphasis on "thinking" and "problem solving."
18. Intelligence tests are useful in school administration, but they do not measure the sum total of personality.
19. The modern tendency is toward greater flexibility of curriculum.

20. The lecture method is not good as a general teaching procedure in high school work.
21. The class recitation period is primarily for teaching and not for testing.
22. Good method utilizes the laws of learning.
23. As Dewey says, "Real interest consists in the identification of the self with the subject matter to be learned."
24. To prepare for college is not the main purpose of secondary education.
25. The teacher should assume an important responsibility in community life.
26. Health is the most important "cardinal principle" of education.
27. Specific types of subject matter demand specific techniques, in teaching.
28. Education should be the reconstruction of experience.
29. The curriculum should be based upon needs of pupils and adults.
30. Broadly speaking, no subject should be in the curriculum which cannot be defended on the basis of utility.
31. Teachers generally do too much talking in teaching.
32. Education is a state function.
33. There should be an equalization of educational opportunity.
34. Extra-curricular activities are based on sound psychological principles.
35. Junior and senior high school pupils are capable of shouldering much responsibility.
36. The modern tendency is in the direction of "pupil participation" in the government of the high school.
37. Children vary greatly in mental ability.
38. Teachers' marks of pupils are very inaccurate.
39. Colleges should select their entrants from the "best bets."
40. Courses in junior high school should, in the main, be extensive rather than intensive.
41. Methods of teaching should correspond to methods of learning.
42. Sound education must take account of original instincts and emotions.
43. Critical-mindedness, initiative, responsibility, open-mindedness, should be encouraged.

44. There is a significant positive correlation between a pupil's I. Q. and his success in academic school work.
45. "Identity" of opportunity and "equality" of opportunity are not synonymous.
46. The modern emphasis is on silent rather than oral reading.
47. A slow reader is usually a poor reader.
48. A child's I. Q. remains relatively constant.
49. The recapitulation theory is not generally accepted today.
50. Facility in reading is developed more readily by reading a great deal of easy material rather than by reading carefully a small amount of very hard material.
51. The "culture epoch" theory is not generally accepted today.
52. We have better tests for intelligence than we have for character.
53. "Defense mechanisms" are common among people of all classes of society.
54. Fundamental reading habits are: recognition span, fixation pause, regression movement.
55. Materials of instruction should be adapted to individual needs of pupils.
56. Plateaus in learning are the rule, and not the exception.
57. Generally speaking, things should be learned as they will be used later.
58. There is no appreciable correlation between penmanship and intelligence.
59. Knowledge of success and failure is an important factor in improvement.
60. Unfortunate emotional experience causes a great deal of emotional disturbances in children.
61. The main emphasis in teaching should be on immediate rather than deferred values.
62. "The only way to prepare for social life is to engage in social life," says Dewey.
63. "There should not be two sets of ethical principles, one for life inside the school; the other for life outside the school," says Dewey.
64. The secondary school should train both for leadership and followership.
65. The best training for democracy is training in democracy.

140 SYLLABUS IN PRINCIPLES OF EDUCATION

66. The present tendency is toward less home work and a longer school day.
67. "School activities" should be given a definite time allotment in the program of studies.
68. Integration and differentiation are both important functions of the junior high school.
69. It is probably better on the average for the adolescent boy to read "any" and "all" literature than to read nothing.
70. The psychological method should probably be used chiefly in social science teaching.
71. No system of education is sound which fails to consider vocation.
72. Correct English expression is primarily a question of correct habit formation.
73. There is increased attention to the "appreciation" or "consumer's phase" of the fine arts.
74. Social studies should constitute the core of the high school curriculum.
75. There is a tendency to emphasize oral composition.
76. Promotion by subject is the rule in both junior and senior high schools.
77. Departmental teaching is the rule in both junior and senior high schools.
78. Modern high schools are organized on the basis of curriculums.
79. The seventh year of the junior high school is the exploratory year.
80. Modern high schools should have some plan for educational, moral, and social guidance.
81. Education should be regarded as a process of growth.
82. There should be some plan for curriculum re-organization and research in modern school systems.
83. Transfer of training occurs through identical elements.
84. Modern education favors the comprehensive or cosmopolitan type of high school.
85. The psychology of a specific subject consists in the adaptation of the fundamental laws of learning to the specific field.
86. The function of education is to give practice in the right direction with satisfaction.

87. Provision should be made for the education of gifted children in keeping with their abilities.
88. "Brute memory" as such probably cannot be trained.
89. On the average the dull pupils in high school drop out more than the others.
90. The percentage of failing marks in each succeeding year of a continuous subject should decrease.
91. Each child should be given education to the extent he is able to take it.
92. A good teacher should be both "artist" and "machinist."
93. The modern tendency is toward co-education in secondary education.
94. Sex instruction should not be given promiscuously by various high school teachers.
95. The project method, socialized recitation, and supervised study, are recognized concepts of the junior high school.
96. The highest type of discipline is that which has its basis in "social consciousness."
97. Education should hand on and make desirable changes in the "social inheritance."
98. Acquired traits are probably not transmitted to offspring.
99. The school should play an important rôle in the education of the emotions.
100. The modern tendency in physical education is toward less calisthenics.
101. There are spiritual and technical phases to both administration and teaching.
102. The present tendency is toward democracy in school administration.
103. The junior high school should receive all students who will thereby receive more benefit, even though in special cases they have not completed the sixth grade.
104. The leading educators in the country are opposed to high school fraternities.
105. The school should assume an important responsibility for the study habits of pupils.
106. The basic question in curriculum making is not "What is good" but "What is best."
107. A teacher should reveal to pupils methods for checking their own work.

108. A teacher's attitude toward discipline should be impersonal, objective, detached.
109. The "probability curve" is useful for making scales and assigning marks.
110. Innate mental differences between the sexes are negligible.
111. "We may lead a horse to water, but we cannot make him drink; we may lead a pupil to information, but we cannot make him think."
112. "The school should be a purposefully controlled and idealized community," as Cox says.
113. The modern school should contain nothing in the curriculum for which an affirmative case cannot be made out.
114. A curriculum is nothing more than so much paper until it has been taught.
115. The critical question in any type of teaching should always be, "What new attitude or ability am I trying to bring about in these pupils?"
116. The experiential horizons of pupils vary greatly.
117. Teachers are in a real sense social workers.
118. The spirit, not the years, is the measure of a teacher's age.
119. The fundamentals of education can be acquired in less than eight years.
120. No curriculum should be regarded as fixed.
121. The best modern teaching is done by "units."

BIBLIOGRAPHY

Use same bibliography as listed under the unit "Modern Educational Concepts."

UNIT XIX

MODERN EDUCATIONAL CONCEPTS

Explain the meaning of the following modern educational concepts. Indicate what seems to you to be the sanest point of view toward each:

1. Project method
2. Supervised study
3. Socialized recitation
4. Homogeneous grouping
5. Intelligence test
6. Educational test
7. "Educational determinism"
8. Behavioristic psychology
9. Elementary education
10. Secondary education
11. Professional education
12. Dalton Plan
13. Winnetka Plan
14. Platoon system
15. Individualized instruction
16. Social psychology
17. Abnormal psychology
18. Defense mechanism
19. Psychological complex
20. Extra-curricular activities
21. Intra-curricular activities
22. Formal discipline
23. Transfer of training
24. Adolescence
25. Dean of girls
26. Culture epoch theory
27. Five formal steps
28. Recapitulation theory
29. Instincts

30. Non-transmissibility of acquired traits
31. "Activity leading to further activity"
32. Stimulus-response psychology
33. Philosophy of education
34. Psychological method
35. Psychologized subject matter
36. New-type examination
37. Thorndike's laws of learning
38. Junior high school
39. Senior high school
40. Junior college
41. Guidance
42. Assembly
43. Gifted pupil
44. Home-room
45. Cardinal Principles of Secondary Education
46. Study coach
47. Health education
48. Comparative education
49. Practice teaching
50. Psycho-analysis
51. Deferred values in education
52. Subject matter
53. Cultural education
54. Functional psychology
55. Social science
56. Scientific method
57. Scientific movement in education
58. Measurement movement
59. Inductive method
60. Deductive method
61. "Academically minded" and "professionally minded"
62. "Problem pupil"
63. Prognosis
64. Diagnosis
65. Rating card for teachers
66. Teacher placement
67. School "morale"
68. Intelligence
69. Intelligence quotient
70. Achievement quotient

71. Efficiency quotient
72. Test "norm"
73. Performance test
74. Objectivity of a test
75. Vocational education
76. Pre-vocational education
77. Teacher training education
78. Training in service
79. Program of studies
80. Schedule of classes
81. Teaching by "units"
82. Industrial education
83. Departmental teaching
84. Promotion by subject
85. School subject
86. Course
87. Unit of instruction
88. "Credit unit"
89. Elective system
90. Major
91. Minor
92. Grade
93. Mark
94. Moron
95. Whole method of learning
96. Motivation
97. Pupil activity
98. Individual differences
99. Moral education
100. "Mind-set"
101. Education as "growth"
102. Federal Education Bill
103. Self-expression
104. "Education is its own end"
105. Equalization of educational opportunity
106. Social control
107. "Vertical" and "horizontal" learning
108. Exploratory courses
109. Chronological age
110. Psychological age
111. Social age

112. Physiological age
113. Educational age
114. Mental age
115. Discipline
116. Latin Grammar School
117. Academy
118. Correlation
119. Rotation shop courses
120. Gradual development at adolescence
121. Credit for quality
122. Teaching load
123. North Central Association
124. Retardation, elimination, acceleration
125. Sex segregation
126. Integrating education; differentiating education
127. Core curriculum
128. Concomitant learnings
129. "Indoctrination"
130. Standardized test
131. Visual education
132. Direct method of teaching
133. Normal curve of frequency
134. Demonstration lesson
135. Individual test
136. Group test
137. General test
138. Differentiated instruction
139. Corrective teaching
140. Thought question
141. Pragmatism
142. Departmental organization
143. Continuation school
144. Directed study
145. Constant subjects
146. Curriculum prescription
147. Student participation
148. Adult education
149. "Adaptation"
150. "Transfer learners," "lesson learners," "direct learners"
151. Helping teacher
152. Case studies

- 153. Bulletin board
- 154. "Follow-up" work
- 155. Pupil accounting
- 156. Curriculum
- 157. General education

BIBLIOGRAPHY

- 1. Allport, F. H., Social Psychology.
- 2. Bagley, W. C., Classroom Management.
- 3. Bagley, W. C., Determinism in Education.
- 4. Bagley, W. C., The Educative Process.
- 5. Bobbitt, Franklin, The Curriculum.
- 6. Bode, Boyd H., Modern Educational Theories.
- 7. Bonser, F. G., The Elementary School Curriculum.
- 8. Briggs, Thomas H., The Junior High School.
- 9. Briggs, Thomas H., Curriculum Problems.
- 10. Buckingham, B. R., Research for Teachers.
- 11. Buswell, G. T., Fundamental Reading Habits.
- 12. Cardinal Principles of Secondary Education, U. S. Bulletin, No. 35, 1918.
- 13. Chapman, J. C., and Counts, G. S., Principles of Education.
- 14. Charters, W. W., Curriculum Construction.
- 15. Colvin, S. S., The Learning Process.
- 16. Cox, P. W. L., Curriculum Adjustment in the Secondary School.
- 17. Cubberley, E. P., Public School Administration.
- 18. Davis, C. O., Junior High School Education.
- 19. Dewey, John, Democracy and Education.
- 20. Dewey, John, How We Think.
- 21. Dewey, John, Moral Principles in Education.
- 22. Douglass, A. A., Secondary Education.
- 23. Gates, A. I., Psychology for Students of Education.
- 24. Hall-Quest, Alfred, Supervised Study.
- 25. Hasic, James F., Brief Guide to the Project Method.
- 26. Inglis, Alexander, Principles of Secondary Education.
- 27. Johnson, Franklin W., Administration and Supervision of the High School.
- 28. Johnston, Chas. H., The Modern High School.
- 29. Johnston and Others, Junior-Senior High School Administration.

148 SYLLABUS IN PRINCIPLES OF EDUCATION

30. Judd, Chas. H., *Psychology of Secondary Education*.
31. Kandel, I. L., *Twenty-five Years of American Education*.
32. Kilpatrick, W. H., *Foundations of Method*.
33. Kilpatrick, W. H., *Source Book in the Philosophy of Education*.
34. Koos, Leonard V., *The American Secondary School*.
35. McCall, William, *How to Measure in Education*.
36. McKown, H. C., *Extra-Curricular Activities*.
37. McMurry, Frank M., *How to Study*.
38. Monroe, Paul, *Principles of Secondary Education*.
39. Monroe, W. S., *Directing Learning in the High School*.
40. Morrison, H. C., *The Practice of Teaching in the Secondary School*.
41. Pechstein, L. A., and McGregor, A. L., *Psychology of the Junior High School Pupil*.
42. Peters, C. C., *Foundations of Educational Sociology*.
43. Pintner, Rudolph, *Intelligence Testing*.
44. Ruch, G. M., *The Improvement of the Written Examination*.
45. Rugg, H. O., *Statistical Methods Applied to Education*.
46. Strayer, G. D., and Engelhardt, N. L., *The Classroom Teacher*.
47. Suzzallo, Henry, *Our Faith in Education*.
48. Symonds, Percival M., *Measurement in Secondary Education*.
49. Terman, L. M., *Intelligence of School Children*.
50. Terman, *The Measurement of Intelligence*.
51. Thorndike, E. L., *Educational Psychology*.
52. Uhl, W. L., *Principles of Secondary Education*.
53. Van Denberg, J. K., *The Junior High School Idea*.
54. Watson, John B., *Psychology from the Standpoint of a Behaviorist*.
55. Woodworth, R. S., *Psychology of Mental Life*.
56. *Yearbooks of the National Society for the Study of Education*.
57. *Yearbooks of the Department of Superintendence*.

UNIT XX

LEADING EDUCATORS

What has been the specific contribution of each of the following men to education? Where are they now located?

- | | |
|--------------------------|----------------------------|
| 1. Allport, Floyd H. | 29. Kelly, F. J. |
| 2. Bagley, William C. | 30. Kilpatrick, William H. |
| 3. Bobbitt, Franklin | 31. Koos, Leonard V. |
| 4. Briggs, Thomas H. | 32. McCall, William |
| 5. Buckingham, B. R. | 33. McMurry, Frank M. |
| 6. Buswell, G. T. | 34. Monroe, Paul |
| 7. Charters, W. W. | 35. Monroe, Walter S. |
| 8. Colvin, Stephen S. | 36. Morrison, H. C. |
| 9. Counts, G. S. | 37. Newlin, Jesse H. |
| 10. Courtis, S. A. | 38. O'Shea, M. V. |
| 11. Cox, P. W. L. | 39. Otis, Arthur S. |
| 12. Cubberley, E. P. | 40. Pechstein, L. A. |
| 13. Davis, C. O. | 41. Reisner, Edward H. |
| 14. Dewey, John | 42. Rugg, H. O. |
| 15. Elliott, Chas. W. | 43. Russel, James E. |
| 16. Engelhardt, N. L. | 44. Russel, William F. |
| 17. Fretwell, Elbert K. | 45. Snedden, David |
| 18. Gates, Arthur I. | 46. Strayer, George D. |
| 19. Graves, Frank P. | 47. Suzzallo, Henry |
| 20. Gray, William A. | 48. Terman, L. M. |
| 21. Henmon, V. A. C. | 49. Thorndike, Edward L. |
| 22. Holmes, Henry W. | 50. Trabue, M. R. |
| 23. Hosis, James F. | 51. Van Denberg, J. K. |
| 24. Inglis, Alexander. | 52. Washburne, Carleton W. |
| 25. Johnson, Franklin W. | 53. Watson, John B. |
| 26. Johnston, Chas. H. | 54. Whipple, Guy M. |
| 27. Judd, Chas. H. | 55. Withers, John W. |
| 28. Kelley, Truman L. | 56. Woodworth, R. S. |

SUPPLEMENTARY REFERENCES

By

THE AUTHOR

The following bibliography of the author indicates his point of view on many of the problems contained in this Work Book Syllabus.

1. "Detailed Factors in Latin Prognosis," Teachers College Contributions to Education, No. 144, Bureau of Publications, Teachers College, Columbia University.
2. "Latin Prognosis." Journal of Educational Psychology, March 1925.
3. "Mental Discipline in High School Studies." American Schoolmaster, June 1924.
4. "Junior High School English." American Schoolmaster, June 1924.
5. "The Use of Effective Illustration in Teaching." Educational Administration and Supervision, November 1925.
6. "Defense Mechanisms." School and Society, November 21, 1925.
7. "Administrative Technique in Teaching." The High School Teacher, December 1925.
8. "The Second Good Samaritan in Education." The Ohio Teacher, January 1926.
9. "Legitimate and Illegitimate Popularity in Teaching." School News, November 1925.
10. "Barriers Burned Away," (The Psychological Basis of Discipline), American Schoolmaster, October 1925.
11. Review: Uhl's "Principles of Secondary Education," Educational Administration and Supervision, January 1926.
12. "Scientific Psychological Principles Applied to a Typical Teaching Situation in First Year Algebra." School Science and Mathematics, April 1926.

SUPPLEMENTARY REFERENCES BY AUTHOR 151

13. "Selling Education in the Classroom." *School News*, May 1926.
14. "High School Education as an Investment." *School News*, June 1926.
15. (With Donald M. Kidd.) "The Salaries of Superintendents and Mayors in Cities of 100,000 Population or Over," *American School Board Journal*, September and October 1926.
16. "Alphabetic Arrangement of Pupils in Typical High School Classrooms." *The Ohio Teacher*, November 1926.
17. "The Five-minute Period." *The High School Journal*, November 1926.
18. (With Samuel McLaughlin), "The Study of the Professionalization of the High School Principal in the State of Maine." *Educational Administration and Supervision*, January 1927.
19. "The Problem of Latin in the Junior High School." *The Ohio Teacher*, March 1927.
20. "The Application of the Project Idea to a Course in Elementary or General Science." *Journal of Educational Method*, May 1927.
21. The Application of Sound Psychological Principles to a Typical Teaching Situation in English." *School News*, June 1927.
22. "The Contributions of Modern Education to Specific Subject Techniques." *American School Board Journal*, March 1927.
23. "The Modern Outlook in the Field of Education." *Educational Radiograms*, Syracuse University, 1927.
24. "Teaching Techniques." *School News*, October 1927.
25. Review: Ben Wood's Volume: "New York Experiments with New-Type Modern Language Tests." *Educational Administration and Supervision*, March 1928.
26. (With J. K. Walklett), "Comparative School Marks of September and January Junior High School Entrants." *Journal of Educational Research*, March 1928.

REFERENCE BOOKS

- Allport, F. H., *Social Psychology*. Boston: Houghton Mifflin, 1924.
- Bagley, W. C., *Classroom Management*. New York: Macmillan, 1922.
- , *Determinism in Education*. Baltimore: Warwick & York, 1925.
- , *Educative Process*. New York: Macmillan, 1905.
- , *School Discipline*. New York: Macmillan, 1914.
- Bagley, W. C. and Keith, J. A., *Introduction to Teaching*. New York: Macmillan, 1924.
- Baldwin, William, *Vocational Education*. U. S. Bulletin, No. 28, 1923.
- Belting, Paul E., *The Community and Its High School*. New York: Heath, 1924.
- Bennett, Chas. J., *Formal Discipline*. New York: Teachers College, 1907.
- Bobbitt, Franklin, *The Curriculum*. Boston: Houghton Mifflin, 1918.
- Bode, Boyd, H., *Fundamentals of Education*. New York: Macmillan, 1921.
- , *Modern Educational Theories*. New York: Macmillan, 1927.
- Bonser, F. G., *The Elementary School Curriculum*. New York: Macmillan, 1920.
- Briggs, Thomas H., *Curriculum Problems*. New York: Macmillan, 1926.
- , *The Junior High School*. Boston: Houghton Mifflin, 1920.
- Buckingham, B. R., *Research for Teachers*. New York: Silver Burdett, 1926.
- Buswell, G. T., *Fundamental Reading Habits*. Chicago: University of Chicago, 1922.
- Cardinal Principles of Secondary Education*, U. S. Bulletin, No. 35, 1918.

- Chapman, J. C., and Counts, G. S., *Principles of Education*. Boston: Houghton Mifflin, 1924.
- Charters, W. W., *Curriculum Construction*. New York: Macmillan, 1923.
- Clem, Orlie M., *Detailed Factors in Latin Prognosis*. New York: Teachers College, 1924.
- Clement, J. A., *Curriculum Making in Secondary Schools*. New York: Holt, 1923.
- , *Principles and Practices of Secondary Education*, New York: Century, 1925.
- Colvin, S. S., *Introduction to High School Teaching*. New York: Macmillan, 1922.
- , *The Learning Process*. New York: Macmillan, 1914.
- Cook, William A., *High School Administration*. Baltimore: Warwick & York, 1926.
- Counts, G. S., *The Selective Character of American Secondary Education*. Chicago: University of Chicago, 1922.
- Cox, P. W. L., *Curriculum Adjustment in the Secondary School*. Philadelphia: Lippincott, 1925.
- Cubberley, E. P., *Changing Conceptions of Education*. Boston: Houghton Mifflin, 1909.
- , *Public Education in the United States*. Boston: Houghton Mifflin, 1919.
- , *The Principal and His School*. Boston: Houghton Mifflin, 1923.
- , *Public School Administration*. Boston: Houghton Mifflin, 1916.
- Davis, C. O., *Junior High School Education*. Yonkers: World Book, 1924.
- Davis, S. E., *The Work of the Teacher*. New York: Macmillan, 1918.
- Dewey, John, *Democracy and Education*. New York: Macmillan, 1916.
- , *How We Think*. New York: Heath, 1910.
- , *Interest and Effort in Education*. Boston: Houghton Mifflin, 1913.
- , *Moral Principles in Education*. Boston: Houghton Mifflin, 1909.
- Douglass, A. A., *Secondary Education*. Boston: Houghton Mifflin, 1927.
- Douglass, Harl R., *Modern Methods in High School Teaching*. Boston: Houghton Mifflin, 1926.

- Fiske, John, *The Meaning of Infancy*. Boston: Houghton Mifflin, 1911.
- Foster, C. R., *Extra-curricular Activities in the High School*. Richmond, Virginia: Johnson Publishing Co., 1925.
- Gates, A. I., *Psychology for Students of Education*. New York: Macmillan, 1923.
- Graves, Frank P., *A Student's History of Education*. New York: Macmillan, 1915.
- Hall, G. S., *Adolescence*. Vol. I. New York: Appleton, 1904.
- Hall-Quest, A. L., *Supervised Study*. New York: Macmillan, 1922.
- Hines, H. C., *Junior High School Curricula*. New York: Macmillan, 1924.
- Hosic, James F. and Chase, S. E., *Brief Guide to the Project Method*. Yonkers: World Book, 1925.
- Inglis, Alexander, *Principles of Secondary Education*. Boston: Houghton Mifflin, 1918.
- James, William, *Principles of Psychology*, Vols. 1, 2. New York: Holt, 1890.
- Johnson, Franklin W., *Administration and Supervision of the High School*, New York: Ginn, 1925.
- Johnston, C. H., *The Modern High School*, New York: Scribners, 1916.
- Johnston, C. H., and Others. *Junior-Senior High School Administration*, New York: Scribners, 1922.
- Judd, C. H., *Psychology of Secondary Education*. New York: Ginn, 1927.
- Kandel, I. L., *Twenty-five Years of American Education*, New York: Macmillan, 1923.
- Kilpatrick, W. H., *Education for a Changing Civilization*. New York: Macmillan, 1926.
- , *Foundations of Method*. New York: Macmillan, 1925.
- , *Source-Book in the Philosophy of Education*. New York: Macmillan, 1923.
- Koos, L. V., *The American Secondary School*. Boston: Ginn, 1927.
- McCall, William, *How to Measure in Education*. New York: Macmillan, 1922.
- McDougall, William, *Social Psychology*. Boston: J. W. Luce, 1908.

- McKown, H. C., *Extra-curricular Activities*. New York: Macmillan, 1926.
- McMurry, F. M., *How to Study*. Boston: Houghton Mifflin, 1909.
- Monroe, Paul, *Principles of Secondary Education*. New York: Macmillan, 1922.
- Monroe, W. S., *Directing Learning in the High School*. Garden City: Doubleday Page, 1927.
- Moral Values in Secondary Education, U. S. Bulletin, No. 51, 1917.
- Morehouse, F. M., *Discipline of the School*. New York: Heath, 1914.
- Morrison, H. C., *The Practice of Teaching in the Secondary School*. Chicago: University of Chicago, 1926.
- National Education Association Proceedings, 1922. Washington, D. C.
- Norsworthy, Naomi, and Whitley, M. T., *Psychology of Childhood*. New York: Macmillan, 1920.
- Nutt, Wilbur, *Principles of Teaching High School Pupils*. New York: Century, 1922.
- Palmer, G. H., *The Ideal Teacher*. Boston: Houghton Mifflin, 1908.
- Parker, S. C., *Methods of Teaching in High School*. New York: Ginn, 1922.
- Pechstein, L. A., and McGregor, A. L., *Psychology of the Junior High School Pupil*. Boston: Houghton Mifflin, 1924.
- Peters, C. C., *Foundations of Educational Sociology*. New York: Macmillan, 1924.
- Pillsbury, W. B., *Fundamentals of Psychology*. New York: MacMillan, 1922.
- Pintner, Rudolph, *Intelligence Testing*. New York: Holt, 1923.
- Roberts, William E., *Manual Arts in the Junior High School*. U. S. Bulletin, No. 11, 1924.
- Ruch, G. M., *The Improvement of the Written Examination*. New York: Scott Foresman, 1924.
- Rugg, H. O., *Statistical Methods Applied to Education*. Boston: Houghton Mifflin, 1917.
- Sears, J. B., *Classroom Organization and Control*. Boston: Houghton Mifflin, 1918.
- Strayer, G. D. and Engelhardt, N. L., *The Classroom Teacher*. New York: American Book, 1920.

156 SYLLABUS IN PRINCIPLES OF EDUCATION

- Strayer, G. D. and Norsworthy, Naomi, *How to Teach*. New York: Macmillan, 1917.
- Suzzallo, Henry, *Our Faith in Education*. Philadelphia: Lippincott, 1924.
- Symonds, Percival M., *Measurement in Secondary Education*, New York: Macmillan, 1927.
- Terman, L. M., *Measurement of Intelligence*. Boston: Houghton Mifflin, 1916.
- , *The Hygiene of the School Child*. Boston: Houghton Mifflin, 1914.
- , *The Intelligence of School Children*. Boston: Houghton Mifflin, 1919.
- Thomas-Tindal, Emma V., and Meyers, Jessie D., *Junior High School Life*. New York: MacMillan, 1924.
- Thorndike, E. L., *Educational Psychology*, Vols. 1, 2, 3. New York: Teachers College, 1913.
- , *Educational Psychology, Briefer Course*. New York: Teachers College, 1914.
- Touton, F. C. and Struthers, A. B., *Junior High School Procedure*. New York: Ginn, 1926.
- Uhl, W. L., *Principles of Secondary Education*. New York: Silver Burdett, 1925.
- , *Secondary School Curricula*. New York: Macmillan, 1927.
- Van Denberg, J. K., *The Junior High School Idea*. New York: Holt, 1922.
- Vocational Guidance in Secondary Schools, U. S. Bulletin, No. 19, 1918.
- Watson, J. B., *An Introduction to Comparative Psychology*, New York: Holt, 1921.
- , *Psychology from the Standpoint of a Behaviorist*, Philadelphia: Lippincott, 1919.
- Williams, L. A., and Rice, G. A., *Principles of Secondary Education*. New York: Ginn, 1927.
- Woodworth, R. S., *Dynamic Psychology*, New York: Columbia University, 1918.
- , *The Psychology of Mental Life*, New York: Holt, 1921.
- Yearbooks of National Society for the Study of Education. Bloomington, Illinois: Public School Publishing Co.
- Yearbooks of the Department of Superintendence. Washington, D. C.: National Education Association.

REFERENCE MAGAZINES

- American School Board Journal. Milwaukee: Bruce Publishing Co.
- American Schoolmaster. Ypsilanti, Michigan. Michigan State Normal College.
- Education. Boston: The Palmer Co.
- Educational Administration and Supervision. Baltimore: Warwick and York.
- Educational Review. Garden City: Doubleday, Page & Co.
- Elementary School Journal. Chicago: University of Chicago Press.
- The High School Journal. Chapel Hill, N. C.: University of North Carolina.
- The High School Teacher. Columbus: The High School Teacher Co.
- Journal of Education. Boston: New England Publishing Co.
- Journal of Educational Method. New York: Teachers College.
- Journal of Educational Psychology. Baltimore: Warwick & York.
- Journal of Educational Research. Bloomington, Illinois: Public School Publishing Co.
- The Ohio Teacher. Columbus: The Ohio Teacher Pub. Co.
- Psychological Review. Princeton, N. J.: Psychological Review Co.
- The School News. Taylorville, Ill.: The Parker Pub. Co.
- School Science and Mathematics. Chicago: Smith and Turton.
- School and Society. New York: The Science Press.
- School Review. Chicago: University of Chicago Press.
- Teachers College Record. New York: Teachers College.

INDEX

INDEX

- Academic success, correlation of shop work with, 81
Achievement quotient, 38
Acquired traits, transmissibility of, 34, 141
Adapting education to native traits, 58
Addison, Joseph, aim of Education, 59
Administration, tendency toward democracy in, 141
Adolescence, unit on, 84-86; gradual theory of, 82, 84, 137; definition of by G. Stanley Hall, 84; Stevenson's books in relation to, 84; Rousseau's statement relative to, 84; four groups of characteristics of, 84-85; presentation of sex instruction to, 85; Wordsworth's lines on, 85; responsibility of junior high school, 85, 138; better to read "any" and "all" literature, 140; bibliography, 85-86
Ages, chronological, physiological, pedagogical, educational, psychological, social, 40
Aims of education, unit on, 59-65; statements by educators, 59-62; not preparation for life, 137, 139; changes in social inheritance, 141; bibliography, 65
Ape in banyan tree, 25
Appreciation, phase of education important, 140
Aristotle, aim of education, 59
Ashbaugh, E. J., cost of education, 71; demands of teaching, 134
Bagley, W. C., research in teaching needed, 9; "horizontal" and "vertical" learning, 40; aim of education, 60; individual should carry own weight and something left over, 113; transfer through ideals, 122; purpose of review, 127; teaching conceived as fine art, 130; trusteeship for social inheritance, 131
Bamberger, Florence, teacher with movable point of view, 134
Betts, G. H., aim of education, 61
Bibliography, principles in selection of, 28
Binet, Alfred, contributions to intelligence testing, 39

- Bobbitt, Franklin, "directed" and "undirected" training, 116
Bode, Boyd H., transfer through "concepts," 122
Book, for whom written, 5; emphasis on secondary education, 5; contents of, 7; criteria of, 9-29; purpose of, 12
Briggs, Thomas H., aim of education, 63-64, 137; statement on student government, 103
Buckingham, B. R., definition of intelligence, 36; nature of teaching, 136
Butler, N. M., aim of education, 61
- Cardinal Principles of Secondary Education, 62, 117
Chaliapin, Feodor, influence of early life on, 30, 31
Challenge of secondary education, unit on, 65-72; bibliography, 71-72
Chapman, J. C., and Counts, G. S., aim of education, 62; responsibility of teacher, 133
Charters, W. W., aim of education, 60; "functional analysis," 116
Clem, Orlie M., sensitiveness to problems necessary, 14; plan of conducting class discussions, 23; a sound philosophy of education, 141
Coe, A., aim of education, 62
Co-education, tendency toward, 141
College entrance, "best bets" theory, 138
College teaching, research needed, 9; courses learned "abstractly," 11, responsibility of college teacher of education, 10-11; professional training of teacher, 11; criticism by James Harvey Robinson, 10; should be re-vamped, 9-12; more definite requirements, 12-13; function of teaching, 15-17; types of teaching, old and new, 18; extrication of idea from matrix, 17-19; teacher's greatest function, 20; fact teaching necessary, 24-25; basic issues in foreground, 25-26; dogmatic answers undesirable, 26; selling course, 26-28; selection of bibliography, 28-29
Colvin, S. S., definition of intelligence, 36; characteristics of good intelligence tests, 38; aim of education, 61
Comenius, aim of education, 59
Comprehensive high school, tendency toward, 140
Concomitants in teaching emphasized, 137
Correlation, meaning of, 42; of shop work with academic success, 81

- Cost of secondary education, 66-67, 71
- Counseling, factors in a program for, 118
- Cox, P. W. L., content and method of education, 69; responsibility of junior high school for pupils not interested in scholarship, 82; school an ideal community, 142
- Criteria of book, 9-29; college teaching should be re-vamped, 9-12; more definite requirements, 12-13; body of material to be taught, 13-14; undergraduate course organized in units, 14; approach from non-technical to technical, 14-15; function of teaching, 15-17; extrication of ideas from original matrix, 17-19; purposeful activity, 17-22; socialized procedure, 22-24; fact teaching, 24-25; basic issues in foreground, 25-26; dogmatic answers, 26; selling course, 26-28; selection of bibliography, 28-29
- Curriculum, unit on, 115-119; relation of extra-curricular activities to, 101; election of subjects, 106; basic principles underlying, 115, 138; Rousseau's doctrine of "felt needs," 115; different schools of curriculum thinking, 115-116; Kilpatrick—relation of subject matter to method, 116; Bobbitt on "directed" and "undirected" training, 116; Charters on "functional analysis," 116; relation of Cardinal Principles to, 117; relation to transfer, 123; tendency toward flexibility, 137; courses "extensive" rather than "intensive" in junior high school, 138; emphasis on immediate values, 139; social studies the core, 140; reorganization necessary intermittently, 140-142; not "what is good," but "what is best," 141; only paper until taught, 142; bibliography, 118-119
- Davis, C. O., attitude of high school pupils toward requirements, 13; function of junior high school, 13
- Defense mechanisms, 139
- Departmental teaching, 125
- Development of American policies in education, unit on, 73-76; bibliography, 76
- Development of secondary education, 73-74
- Dewey, John, on interest, 27, 137; aim of education, 60, 64; school as an embryonic community, 102; positive side to character, 102; relation of interest to effort, 125, 137; education the re-construction of experience, 138, 140

Discipline or social control, unit on, 87-100; Morehouse, types of, 86; Morehouse, types of offenses, 87; morale or esprit in relation to, 87; most important phases not covered by legal enactment, 88; problem of modern youth stated by 16 year old girl, 88-89; emotional thermometer of teacher, 90; anticipating outbreaks illustrated by White, 90; an unreasonable attitude toward, 90; impersonal, objective, detached, attitude toward, 91, 142; illegitimate and legitimate popularity, 91-92; influence of student government organizations, 92; negative attitude toward, 93; sympathetic attitude necessary, 93-94; dependent upon fundamental laws of learning, 95-96; detailed illustrations, 97-98; relation of age, grade, I.Q. to, 99; punishment corrective rather than punitive, 137; not two sets of principles, 139; social consciousness, highest type, 141; Cox-purposefully controlled and idealized community, 142; bibliography, 99-100

Education as an investment, 67-68, 138

Educational age, 38

Educational determinism, 40

Educational opportunity, equalization of, 138, 139

Efficiency quotient, 38

Emerson, aim of education, 59

Emotional training, responsibility for, 70, 141

Englehardt, N. L., aim of education, 62

English expression, problem of habit formation, 140; emphasis on oral, 140

Environment, selective power of, 33

Examinations, Ben Wood on purpose of, 19

Experiments in animal learning, 46-47

Extra-curricular activities, unit on, 101-105; justification in modern psychology, 101, 138; attitude of school toward fraternities and sororities, 101; comparison of pupil "self-government" with "pupil participation in government," 101; relation of curricular activities to, 101; difficulties and problems in administration, 102; some principles of a program of, 103; definite time allotment, 140

Federal Education Bill, 71

Ford, Henry, as benefactor, 111

- Formal discipline, 125, 137
- Frank Glenn, research in teaching needed, 9; the teacher as interpreter, 133
- Fraternalities and sororities, attitude of school toward, 101, 141
- Freeman, Bernadine, "lesson performance" illustrated, 17
- Freeman, F. N., definition of intelligence, 36
- Froebel, aim of education, 60
- Function of educational units, 63
- Gates, A. I., learn reaction made, 12; physiological mechanisms, 48; diagrams on levels of reaction, 49-50; transfer—"we learn the reaction that we make," 122, 139
- Gifted pupils, provision for, 141
- Graves Frank P., aim of education, 62
- Gray, Thomas, statement from "Elegy" on lost ability, 30
- Guidance, unit on, 106-109; and I.Q., 42; relation of election of subjects to, 106; types of tests for, 107; Hepner's factors in, 107; factors for a counseling program, 108, 140; bibliography, 108-109
- Hall, G. Stanley, definition of adolescence, 84
- Hall-Quest, A. L., aim of education, 61
- Henmon, V. A. C., definition of intelligence, 36
- Hepner, Harry, factors in guidance, 107
- Herbart, aim of education, 59
- Holley, C. E., purpose of recitation, 127
- Home work, emphasis on less, 140
- Horn, J. L., aim of education, 60
- Hubbard, Elbert, relation of statement to work of teacher, 130
- Humphrey, Harry C., enthusiasm in teaching necessary, 134
- Illustration, choice of, 25-26
- Individual differences, unit on, 30-45; ape and banyan tree, 25, 32; supreme genius, does it will out, 32; supreme genius, does it hear a kind of bug, 33; between sexes, negligible, 142; pupils vary greatly in experiential horizons, 142; bibliography, 44-45
- Industrial Revolution, significance for education, 110
- Inglis, Alexander, aim of education, 62
- Instruction, unit on, 125-129; individualized, 41, 125; formal discipline, 125; logical and psychological methods, 125;

- supervised study, 125; socialized recitation, 125; departmental teaching, 125; different techniques for different subjects, 125; specific principles of, 126-128; bibliography, 128-129
- Intelligence, definitions by Pintner, Thorndike, Terman, Colvin, Henmon, Buckingham, Haggerty, Freeman, Ruml, Pressey, Dearborn, 36
- Intelligence quotient, knowledge of by teacher needed, 25; uses of, formula for, constancy of, 37; of great historical characters, 42; relation to other factors, 42-43, 139; selection of pupils in academic and shop courses on the basis of, 81; relation of discipline to, 99; constancy of, 139; little correlation with penmanship, 139
- Intelligence tests, factors constituting, 38
- Investment, education as an, 67-68
- James, Wm., method of transfer of training, 120
- Johnson, Franklin W., aim of education, 63
- Judd, Chas. H., Great Experiment in secondary education, 66; transfer through generalization, 121
- Junior high school, principles underlying, 75; committee reports promoting growth of, 75; function in dealing with pupils of low I.Q., 82; responsibility for sex instruction, 85; to provide for individual differences, 137; courses-extensive" rather than "intensive" in, 138; integration and differentiation important functions in, 140; promotion by subject in, 140; departmental teaching, 140; seventh year for exploration, 140; admittance to, 141; eight years not necessary for fundamentals of education, 142
- Kandel, I. L., present problems in European secondary education, 78
- Kilpatrick, W. H., experiment in research needed, 9; aim of education, 60, 64; relation of subject matter to method, 116; activity leading to further activity, 128, 137
- Klapper, Paul, aim of education, 60
- Leading educators, unit on, 149
- Learning, fundamental principles of, 46-47, 138, 139; discipline in relation to laws of, 95-96
- Lecture method, little emphasis on, 138

- Lesson performance, illustration of, 16; Bernadine Freeman's statement on, 17
- Levels of reaction, 48-51; diagrams of, 49-50
- Lincoln, Abraham, influence of shovel on, 30-31
- Locke, aim of education, 59
- Lock-step in education, 41
- Logical and psychological methods, 125, 140
- Luther, aim of education, 59
- Marks, very inaccurate, 138; percentage of failing should vary in different years, 141
- McCall, Wm., on borderline intelligence, 35
- McDougall, Wm., aim of education, 61
- McMurray, Frank, function of teacher, 133
- Mental age, knowledge by teacher needed, 25; function, 37
- Mill, J. S., aim of education, 60
- Modern educational concepts, unit on, 143-148; bibliography, 147-148
- Monroe, Paul, aim of education, 61
- Montaigne, aim of education, 59
- More, John Bassett, his reward from teaching, 135
- Morehouse, Frances M., types of discipline, 86; types of offenses, 87
- Morrison, H. C., principle of "adaptation," 15-16; "transfer learners," 122; what new attitude or ability, 142
- Native equipment, unit on, 56-58; bibliography, 58
- Native traits, characteristics of, 56; most important ones, 57; education must be built on, 138
- Nerve current, diagram of passage, 49
- Nervous system, characteristics of, 47; detailed examination of, 52-55
- New education, unit on, 137-142; bibliography, 142
- Normal curve of frequency, 34, 142
- O'Shea, M. V., aim of education, 61
- Parker, F. W., aim of education, 59
- Personnel of teaching profession, change in, 132-134
- Phelps, Wm. L., on why I like teaching, 132
- Physical education, tendency towards less calisthenics, 141

- Physiological basis of learning, unit on, 46-55; bibliography, 55
- Pintner, Rudolph, definition of intelligence, 36
- Plateaus, rule in learning, 139
- Popularity, legitimate and illegitimate methods of securing, 91-92
- Problem solving, emphasis on 137, 142
- Project method, 141
- Purposeful activity, 19-22; problem teaching involves cross-roads, 20; Stockton's story of "Lady and the Tiger," 21; setting the problem, 22
- Rabelais, aim of education, 59
- Reading, emphasis on silent, 139; fundamental habits in, 139
- Recapitulation theory, 57, 139
- Recitation, primary purpose of, 138
- Reference books, 152-156
- Reference magazines, 157
- References, supplementary by the author, 150-151
- Robinson, James Harvey, criticism of teaching, 10; on growth of civilization, 110
- Rosenkranz, aim of education, 59
- Rousseau, statement relative to adolescence, 84; doctrine of felt needs, 115
- Ruediger, W. C., aim of education, 61; transfer through ideals, 122
- Ruger, Henry, transfer through ideals, 122
- Ruskin, John, man has right to what he earns, 111
- Secondary education in other countries, unit on, 77-79; Monroe on steps in development of, 63-64; developments in, 66; Great Experiment in, 66; cost of, 66-67; responsibility for moral and emotional training, 70; responsibility for education of adults, 71; early secondary schools, curriculum, support, method of control, etc., 73; characteristics of English High School of Boston, 73-74; Massachusetts Law, 1647, 74; growth of enrollment of, 76; recent tendencies in, 76; in Germany, France, England, 77-78; recent tendencies in re-organization in European systems, 78; bibliography, 79
- Secondary school pupil, unit on, 80-83; characteristics of, 80-81; variation in physical traits of, 81; variation in mental traits, 81; bibliography, 83

- Self-realization, emphasis on, 137
- Selling education, to community, 69-70; to pupils, 69-70
- Sex instruction, presentation to adolescents, 85, 141
- Snedden, David, vocational education dependent on sound system of economics, 113
- Social conditions, influence of education on, 68
- Social studies, core of curriculum, 140
- Socialized procedure, 22-24, 125, 141; master teacher leader of discussion, 22; characteristics of socialized recitation, 22-23; dangers to be avoided, 23
- Special aptitudes, 37
- Spencer, aim of education, 60
- Stevenson, R. L., relation to adolescence of books of, 84
- Stimulus response psychology, 47
- Stoddard, Lothrop, extracts on social and political selectivity, 34-35
- Strayer, G. D., aim of education, 60
- Student government organizations, relation to discipline, 92
- Supervised study, 125, 141
- Supplementary references, by the author, 150-151
- Teacher, unit on, 130-136; relation of Elbert Hubbard's statement to work of, 130; Bagley, teaching conceived as fine art, 130; change in personnel of, 130-131; Bagley, trusteeship for social inheritance, 131; personal influence of 132-134; teaching as a profession, 135; spirit and not years measure of age of, 142; bibliography, 136
- Techniques for different subjects, 125, 138, 140
- Terman, L. M., definition of intelligence, 36; grades of intelligence, 37-38; conclusions on superior children, 41; effect of teaching, 41
- Tests, types for guidance, 107; do not measure total personality, 137; better for intelligence than character, 139
- Thinking, when we do it, 20
- Thorndike, E. L., on originality and initiative, 24; effect of heredity, 34; definition of intelligence, 36; types of intelligence, 37; theory of intelligence, 37; report of study on Kallikaks, 43-44; treatment of instincts by, 56; aim of education, 59; fundamental laws of learning, 112, 140; and Woodworth's experiment in transfer, 120; transfer

- through "identical elements," 122, 140; small spread of training may have great value, 123
- Transfer of training, unit on, 120-124; definition of, 120; Thorndike and Woodworth's experiment, 120; theories of, 120-121; points of view of leaders concerning, 122; relation of curriculum to, 123; bibliography, 124
- Types of personality, illustrated by Wilson and Harding, 37
- Uhl, W. L., summary of American policy in secondary education, 74-75
- Units, organization of work in, 14, 142
- Variation and selection, influence of, 33; Davenport on Harvard graduates and Rumanians in Boston, 35; Miss Hempleman on botany field trip, 35
- Vocation and education, unit on, 110-114; significance of Industrial Revolution, 110; importance of vocation in scheme of education, 110-111; application of sound educational principles to, 112-113; bibliography, 114
- War, effect on biological heredity, 34
- Ward, Lester F., Statement from "Applied Sociology" on lost ability, 30
- Watson, John B., list of instincts by, 56
- Wood, Ben, purpose of an examination, 19
- Woodworth, R. S., general factors in intelligence, 37; limitations of intelligence tests, 38; diagram on passage of nerve current, 49; and Thorndike's experiments on transfer, 120
- Wordsworth, William, lines on adolescence, 85

LIBRARY OF DAVIDSON COLLEGE

A fine of five cents a day on ordinary books, and of five cents an hour on reserved books, is due after date stamped.

Special books are subject to special regulations at the discretion of the library staff.

--	--	--	--	--	--

Clem

371

AUTHOR

C62

A work book syllabus in
principles of education

DATE DUE	BORROWER'S NAME

Clem

371

C62

A work book syllabus in
principles of education

